

GenCore version 5.1.4-p5-4578  
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OM protein - protein search, using sw model

Run on: March 24, 2003, 17:16:57 ; Search time 25.6875 Seconds  
(without alignments)  
46.686 Million cell updates/sec

Title: US-09-508-828B-1  
Perfect score: 44  
Sequence: 1 GXDXEDRY 9

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues  
Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000  
Post-processing: Minimum Match 08  
Maximum Match 100%  
Listing first 45 summaries

Database : A\_Geneseq\_101002:\*

1: /SIDSL/gcgdata/geneseq/geneseq-emb1/AA1980.DAT:\*  
2: /SIDSL/gcgdata/geneseq/geneseq-emb1/AA1981.DAT:\*  
3: /SIDSL/gcgdata/geneseq/geneseq-emb1/AA1982.DAT:\*  
4: /SIDSL/gcgdata/geneseq/geneseq-emb1/AA1983.DAT:\*  
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6: /SIDSL/gcgdata/geneseq/geneseq-emb1/AA1985.DAT:\*  
7: /SIDSL/gcgdata/geneseq/geneseq-emb1/AA1986.DAT:\*  
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22: /SIDSL/gcgdata/geneseq/geneseq-emb1/AA2001.DAT:\*  
23: /SIDSL/gcgdata/geneseq/geneseq-emb1/AA2002.DAT:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	41	93.2	21	14	AA198001
2	41	93.2	25	14	AA198003
3	41	93.2	25	14	AA198005
4	41	93.2	31	14	AA198097
5	41	93.2	31	14	AA198699
6	41	93.2	33	18	AA198545
7	41	93.2	33	21	AA198504
8	41	93.2	33	21	AA198508
9	41	93.2	142	18	AA198786
10	41	93.2	208	21	AA1987318

11	41	93.2	208	21	AA1987329	Human prion protei
12	41	93.2	217	21	AA1987317	Cattle prion prote
13	41	93.2	217	21	AA1987328	Cattle prion prote
14	41	93.2	219	19	AA19870261	Bovine prion prote
15	41	93.2	219	20	AA19893571	Bovine prion prote
16	41	93.2	253	17	AA1986715	Human prion protei
17	41	93.2	253	19	AA1986960	Human prion protei
18	41	93.2	253	20	AA1987994	Human prion protei
19	41	93.2	253	20	AA1985901	Human prion protei
20	41	93.2	253	21	AA1985035	Human prion protei
21	41	93.2	253	21	AA1986272	Human prion protei
22	41	93.2	253	21	AA1981485	Human prion protei
23	41	93.2	253	22	AA1985853	Human prion protei
24	41	93.2	253	22	AA1982112	Human prion protei
25	41	93.2	253	22	AA1987238	Human prion protei
26	41	93.2	253	22	AA1987239	Human prion protei
27	41	93.2	253	22	AA1987234	Human prion protei
28	41	93.2	253	22	AA1987235	Human prion protei
29	41	93.2	253	22	AA1987236	Human prion protei
30	41	93.2	253	22	AA1987237	Human prion protei
31	41	93.2	253	23	AA1985187	Human prion protei
32	41	93.2	253	23	AA19879575	Human prion protei
33	41	93.2	253	23	AA1985603	Human prion protei
34	41	93.2	253	23	AA19804426	Human prion protei
35	41	93.2	257	23	AA1987236	Human prion protei
36	41	93.2	257	23	AA1986716	Human prion protei
37	41	93.2	263	17	AA1986961	Human prion protei
38	41	93.2	263	19	AA1985902	Human prion protei
39	41	93.2	263	22	AA1985854	Human prion protei
40	41	93.2	263	23	AA1985188	Human prion protei
41	41	93.2	264	20	AA1987995	Human prion protei
42	41	93.2	264	22	AA1982113	Human prion protei
43	41	93.2	264	22	AA19872361	Human prion protei
44	41	93.2	264	22	AA19872362	Human prion protei
45	41	93.2	264	22	AA19872364	Human prion protei

ALIGNMENTS

RESULT 1	AA198001	standard; protein; 21 AA.
ID	AA198001	
AC	AA198001	
DT	14-OCT-1993	(first entry)
DE	Prion protein region B #5.	
KW	Antigen; prion; protein; region; frame shift; repeat; mutation; prp;	
KW	Fsa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;	
KW	human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;	
KW	immune system; prpsc; ratio-inverso peptide; enzymatic degradation;	
KW	resistance.	
OS	Synthetic.	
PN	WO9311155-A.	
PD	10-JUN-1993.	
PF	03-DEC-1992:	92MO-GB02246.
PR	03-DEC-1992:	91GB-0025747.
PR	10-JUL-1992:	92GB-0014663.
PA	(PROT-) PROTEUS MOLECULAR DESIGN LTD.	
PI	Fishleigh RV, Mee RP, Robson B:	
DR	WPI, 1993-196994/24.	
XX		

PT New polypeptide(s) contg. antigenic site of prion protein -  
 PT useful for treatment and diagnosis of mammalian encephalopathies  
 e.g. Creutzfeldt-Jacob disease and kuru

PS Claim 10; Page 65; 82pp; English.

CC The sequences given in AAR36797-99 and AAR38000-01 represent  
 CC polypeptides derived from an antigenic site, region B, of a prion  
 CC protein. Prion proteins comprise six regions of interest (A-F), and two  
 CC related frame shift peptides sequences caused by a repeating section in  
 CC of +1 (Fsa) or -1 (Fsb). These peptides and subfragments of these  
 CC (see AAR38002-05), and antibodies raised against these, may be used to  
 CC treat or prevent spongiform encephalopathy in humans, sheep or cattle.  
 CC They can be used to block cellular binding and aggregation of prion  
 CC proteins and to stimulate the mammalian immune system. These peptides  
 CC may be used to distinguish between the normal form of prion protein  
 CC (PrPc) and the scrapie-associated form (PrPsc). These peptides may  
 CC include rare or synthetic amino acids or a ratio-inverso peptide  
 CC modification to improve resistance to enzymatic degradation.

SO Sequence 21 AA;

Query Match 93.2%; Score 41; DB 14; Length 21;  
 Best Local Similarity 77.8%; Pred. No. 0.22;

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GXDXEDRY 9  
 11 GSDYEDRY 19

DB 11 GSDYEDRY 19

RESULT 2  
 AAR38003 AAR38003 standard; protein; 25 AA.

AC AAR38003;

DT 14-OCT-1993 (first entry)

DE Prion protein region B subfragment #1.

KW Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;  
 KW Fsa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;  
 KW human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;  
 KW immune system; PrPsc; ratio-inverso peptide; enzymatic degradation;  
 KW resistance.

XX Synthetic.

OS Key Location/Qualifiers

FT MISC-difference 1 /note- "One or more residues or may be absent"

FT MISC-difference 2 /note- "May be absent"

FT MISC-difference 3 /note- "May be absent"

FT MISC-difference 4 /note- "May be absent"

FT MISC-difference 5 /note- "May be absent"

FT MISC-difference 21 /note- "May be absent"

FT MISC-difference 22 /note- "May be absent"

FT MISC-difference 23 /note- "May be absent"

FT MISC-difference 24 /note- "May be absent"

FT MISC-difference 25 /note- "May be absent"

PN MISC-difference 25 /note- "One or more residue or may be absent"

XX 10-JUN-1993.

XX 03-DEC-1992; 92WO-GB02246.

XX 03-DEC-1991; 91GB-0025747.

XX 10-JUL-1992; 92GB-0014663.

XX (PROT-) PROTEUS MOLECULAR DESIGN LTD.

XX Fishleigh RV, Mee RP, Robson B;

XX WPI: 1993-196994/24.

XX New polypeptide(s) contg. antigenic site of prion protein -  
 XX useful for treatment and diagnosis of mammalian encephalopathies  
 e.g. Creutzfeldt-Jacob disease and kuru

PS Claim 12; Page 65; 82pp; English.

CC The sequences given in AAR38002-05 represent polypeptide subfragments  
 CC derived from an antigenic site, region B, of a prion protein. Prion  
 CC proteins comprise six regions of interest (A-F), and two related  
 CC frame shift peptides sequences caused by a repeating section in  
 CC of +1 (Fsa) or -1 (Fsb). These subfragments or the full length peptide  
 CC (see AAR36796-99 and AAR38000-01), and antibodies raised against these,  
 CC may be used to treat or prevent spongiform encephalopathy in humans,  
 CC sheep or cattle. They can be used to block cellular binding and  
 CC aggregation of prion proteins and to stimulate the mammalian immune  
 CC system. These peptides may be used to distinguish between the normal  
 CC form of prion protein (PrPc) and the scrapie-associated form (PrPsc).  
 CC These peptides may include rare or synthetic amino acids or a  
 CC ratio-inverso peptide modification to improve resistance to enzymatic  
 CC degradation.

SO Sequence 25 AA;

Query Match 93.2%; Score 41; DB 14; Length 25;  
 Best Local Similarity 77.8%; Pred. No. 0.27;

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GXDXEDRY 9  
 12 GSDYEDRY 20

DB 12 GSDYEDRY 20

RESULT 3

AAR38005 AAR38005 standard; protein; 25 AA.

AC AAR38005;

DT 14-OCT-1993 (first entry)

DE Prion protein region B subfragment #3.

KW Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;  
 KW Fsa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;  
 KW human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;  
 KW immune system; PrPsc; ratio-inverso peptide; enzymatic degradation;  
 KW resistance.

XX Synthetic.

OS Key Location/Qualifiers

FT MISC-difference 1 /note- "One or more residues or may be absent"

FT MISC-difference 2 /note- "May be absent"

FT MISC-difference 3 /note- "May be absent"

FT MISC-difference 4 /note- "May be absent"

FT /note- "May be absent"  
 FT Misc-difference 5 /note- "May be absent"  
 FT Misc-difference 21 /note- "May be absent"  
 FT Misc-difference 22 /note- "May be absent"  
 FT Misc-difference 23 /note- "May be absent"  
 FT Misc-difference 24 /note- "May be absent"  
 FT Misc-difference 25 /note- "May be absent"  
 FT /note- "One or more residue or may be absent"  
 PN MO9311155-A.  
 XX 10-JUN-1993.  
 PD 03-DEC-1992; 92WO-GB02246.  
 PE 03-DEC-1991; 91GB-0025747.  
 PR 10-JUL-1992; 92GB-0014663.  
 XX (PROT-) PROTEUS MOLECULAR DESIGN LTD.  
 PA Fishleigh RV, Mee RP, Robson B;  
 PI WPI: 1993-196994/24.  
 DR New polypeptide(s) contg. antigenic site of prion protein -  
 XX useful for treatment and diagnosis of mammalian encephalopathies  
 PT e.g. Creutzfeldt-Jacob disease and kuru  
 PS Claim 12; Page 66; 82pp; English.  
 XX The sequences given in AAR38002-05 represent polypeptide subfragments  
 CC derived from an antigenic site, region B, of a prion protein. Prion  
 CC proteins comprise six regions of interest (A-F), and two related  
 CC proteins shift peptides sequences caused by a repeating section in  
 CC frame shift peptides having a nucleic acid coding sequence frame shift mutation  
 CC of +1 (Fsa) or -1 (Fsb). These subfragments or the full length peptide  
 CC (see AAR36796-99 and AAR38000-01), and antibodies raised against these,  
 CC may be used to treat or prevent spongiform encephalopathy in humans,  
 CC sheep or cattle. They can be used to block cellular binding and  
 CC aggregation of prion proteins and to stimulate the mammalian immune  
 CC system. These peptides may be used to distinguish between the normal  
 CC form of prion protein (PrPc) and the scrapie-associated form (PrPsc).  
 CC These peptides may include rare or synthetic amino acids or a  
 CC ratio-inverso peptide modification to improve resistance to enzymatic  
 CC degradation.  
 CC  
 SO Sequence 25 AA;  
 Query Match 93.2%; Score 41; DB 14; Length 25;  
 Best Local Similarity 77.8%; Pred. No. 0.27; Mismatches 2; Indels 0; Gaps 0;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 OY 1 GXDXEDRY 9  
 | | | | |  
 DB 12 GSDYEDRY 20  
 RESULT 4  
 AAR36797  
 ID AAR36797 standard; protein: 31 AA.  
 AC AAR36797;  
 DT 14-OCT-1993 (first entry)  
 XX Prion protein region B #1.  
 DE Antigen: prion; protein; region; frame shift; repeat; mutation; PrPc;  
 XX  
 KW

KW Fsa; subfragment; antibody; treatment; spongiform encephalopathy;  
 KW human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;  
 KW immune system; PrPc; ratio-inverso peptide; enzymatic degradation;  
 KW resistance.  
 XX Synthetic.  
 XX  
 XX Key location/Qualifiers  
 FT Misc-difference 1 /note- "One or more residues or may be absent"  
 FT Misc-difference 2 /note- "May be absent"  
 FT Misc-difference 3 /note- "May be absent"  
 FT Misc-difference 4 /note- "May be absent"  
 FT Misc-difference 5 /note- "May be absent"  
 FT Misc-difference 27 /note- "May be absent"  
 FT Misc-difference 28 /note- "May be absent"  
 FT Misc-difference 29 /note- "May be absent"  
 FT Misc-difference 30 /note- "May be absent"  
 FT Misc-difference 31 /note- "May be absent"  
 FT /note- "One or more residue or may be absent"  
 PN MO9311155-A.  
 XX 10-JUN-1993.  
 PD 03-DEC-1992; 92WO-GB02246.  
 PE 03-DEC-1991; 91GB-0025747.  
 PR 10-JUL-1992; 92GB-0014663.  
 XX (PROT-) PROTEUS MOLECULAR DESIGN LTD.  
 PA Fishleigh RV, Mee RP, Robson B;  
 PI WPI: 1993-196994/24.  
 DR New polypeptide(s) contg. antigenic site of prion protein -  
 XX useful for treatment and diagnosis of mammalian encephalopathies  
 PT e.g. Creutzfeldt-Jacob disease and kuru  
 PS Claim 9; Page 64; 82pp; English.  
 XX The sequences given in AAR36797-99 and AAR38000-01 represent  
 CC polypeptides derived from an antigenic site, region B, of a prion  
 CC protein. Prion proteins comprise six regions of interest (A-F), and two  
 CC related frame shift peptides sequences caused by a repeating section in  
 CC region E having a nucleic acid coding sequence frame shift mutation  
 CC of +1 (Fsa) or -1 (Fsb). These peptides and subfragments of these  
 CC (see AAR38002-05), and antibodies raised against these, may be used to  
 CC treat or prevent spongiform encephalopathy in humans, sheep or cattle.  
 CC They can be used to block cellular binding and aggregation of prion  
 CC proteins and to stimulate the mammalian immune system. These peptides  
 CC may be used to distinguish between the normal form of prion protein  
 CC (PrPc) and the scrapie-associated form (PrPsc). These peptides may  
 CC include rare or synthetic amino acids or a ratio-inverso peptide  
 CC modification to improve resistance to enzymatic degradation.  
 CC  
 SO Sequence 31 AA;  
 Query Match 93.2%; Score 41; DB 14; Length 31;  
 Best Local Similarity 77.8%; Pred. No. 0.33; Mismatches 2; Indels 0; Gaps 0;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 OY 1 GXDXEDRY 9  
 | | | | |  
 KW

DB 12 GSDYEDRY 20

RESULT 5  
 AAR36799  
 ID AAR36799 standard; protein; 31 AA.  
 XX  
 AC AAR36799;

XX 14-OCT-1993 (first entry)  
 XX  
 DE Prion protein region B #3.

XX Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;  
 KM F8a; F8b; subfragment; antibody; treatment; spongiform encephalopathy;  
 KM human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;  
 KM immune system; PrPsc; ratio-inverso peptide; enzymatic degradation;  
 XX resistance.

XX Synthetic.

XX Key Location/Qualifiers

FT Misc-difference 1 /note- "One or more residues or may be absent"

FT Misc-difference 2 /note- "May be absent"

FT Misc-difference 3 /note- "May be absent"

FT Misc-difference 4 /note- "May be absent"

FT Misc-difference 5 /note- "May be absent"

FT Misc-difference 27 /note- "May be absent"

FT Misc-difference 28 /note- "May be absent"

FT Misc-difference 29 /note- "May be absent"

FT Misc-difference 30 /note- "May be absent"

FT Misc-difference 31 /note- "May be absent"

FT Misc-difference 31 /note- "One or more residue or may be absent"

PN W09311155-A.

PD 10-JUN-1993.

PF 03-DEC-1992; 92WO-GB02246.

PR 03-DEC-1991; 91GB-0025747.

PR 10-JUL-1992; 92GB-0014663.

PA (PROT-) PROTEUS MOLECULAR DESIGN LTD.

XX Fishleigh RV, Mee RP, Robson B;

DR WPI; 1993-196994/24.

XX New polypeptide(s) conty. antigenic site of prion protein -  
 PT useful for treatment and diagnosis of mammalian encephalopathies  
 PT e.g. Creutzfeldt-Jacob disease and kuru  
 PS  
 XX Claim 9; Page 65; 82pp; English.

XX The sequences given in AAR36797-99 and AAR38000-01 represent  
 CC polypeptides derived from an antigenic site, region B, of a prion  
 CC protein. Prion proteins comprise six regions of interest (A-F), and two  
 CC related shift peptides sequences caused by a repeating section in  
 CC region E having a nucleic acid coding sequence frame shift mutation  
 CC of +1 (F8a) or -1 (F8b). These peptides and subfragments of these  
 CC (see AAR38002-05), and antibodies raised against these, may be used to  
 CC treat or prevent spongiform encephalopathy in humans, sheep or cattle.  
 CC They can be used to block cellular binding and aggregation of prion

CC proteins and to stimulate the mammalian immune system. These peptides  
 CC may be used to distinguish between the normal form of prion protein  
 CC (PrPc) and the scrapie-associated form (PrPsc). These peptides may  
 CC include rare or synthetic amino acids or a ratio-inverso peptide  
 CC modification to improve resistance to enzymatic degradation.

SO Sequence 31 AA;  
 QY Query Match 93.2%; Score 41; DB 14; Length 31;  
 Db Best Local Similarity 77.8%; Pred. No. 0.33;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

RESULT 6

AAW35545  
 ID AAW35545 standard; peptide; 33 AA.

AC AAW35545;

DT 22-APR-1998 (first entry)

DE Immunization DMDPC SEQ ID NO:89 from W09738011.

XX T-cell stimulatory peptide; immunogen; non-dendritic; carrier; tumour;  
 XX scaffold; inhibition; metastasis; wound healing; solid phase.

XX Synthetic.

PN W09738011-A1.

PD 16-OCT-1997.

PF 03-APR-1997; 97WO-DE00146.

PR 03-APR-1996; 96DK-0000398.

PA (PEPR-) PEPPERSEARCH AS.

XX Heegaard PMH, Jakobsen PH;

DR WPI; 1997-512645/47.

XX Non-dendritic peptide carrier linked to a solid phase - useful as a  
 PT diagnostic agent and as a scaffold for production of chemical  
 PT derivatives

PS Example 31; Page 156; 262pp; English.

XX A non-dendritic peptide carrier (A) has been developed which is coupled  
 CC through a linker to a solid phase, forming a complex of (A)-solid phase.  
 CC Where (A) comprises 10-50 amino acids capable of forming a secondary  
 CC structure in a benign buffer after liberation from the solid phase, and  
 CC and/or an immune mediator coupled on (A). The present sequence  
 CC represents a peptide used in an example from the present invention.  
 CC (A)-solid phase complex can be used as a scaffold for the production of  
 CC chemical derivatives, characterised by covalently attaching molecules at  
 CC attachment points. Alternatively (A) is used as a scaffold-peptide for  
 CC the incorporation into an immunostimulating complex (ISCOM) resulting in  
 CC substances in an aqueous solution by conjugation. (A) derivatised with  
 CC one or more peptides having fibronectin-, laminin- or vitronectin-like  
 CC binding activities can be used for the promotion of cell-attachment to  
 CC plastic surfaces, in particular to inhibit tumour growth and metastasis,  
 CC and for promotion of wound healing. Also a derivatised (A) can be used  
 CC for the selection of specifically-binding aptamers or as a diagnostic  
 CC agent. Such diagnostic-(A) molecules could be used to detect molecules  
 CC derived from or indicative of pregnancy or of a disease, such as an  
 CC infectious, autoimmune or cancerous disease.



XX Sequence 33 AA;

Query Match 93.2%; Score 41; DB 18; Length 33;  
Best Local Similarity 77.8%; Pred. No. 0.36;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
1 | | | | |  
Db 1 GSDYEDRY 9

RESULT 7  
AAB15054  
ID AAB15054 standard; Peptide: 33 AA.

XX AAB15054;

XX 18-DEC-2000 (first entry)

DE Human prion protein peptide homologous to ovine sequence 145-177.

XX Prion; PrP; guanidine thiocyanate; gdnSCN; TSE; BSE;

KW transmissible spongiform encephalopathy; antibody;

KW bovine spongiform encephalopathy; sheep; cattle; human; mouse;

KW hamster; rabbit.

XX Homo sapiens.

XX WO200048003-A1.

XX 17-AUG-2000.

XX 09-FEB-2000; 2000WO-NL00079.

XX 11-FEB-1999; 99EP-0200391.

XX (DIEN-) STICHTING DIENST LANDBOUWKUNDIG ONDERZOE.

PI Garssen GJ, Jacobs JG, Langeveld JPM, Smits MA, Van Keulen LJM;

PI Schreuder BEC, Bossers A;

XX WPI; 2000-506099/45.

XX Use of guanidine thiocyanate for reducing risk of false-positive

PT results in testing mammalian sample for aberrant prion protein, useful

PT for detection of transmissible spongiform encephalopathies -

XX Disclosure; Fig 2; 49pp; English.

XX The present invention relates to a method for reducing the risk of

CC scoring a false positive test result in testing a sample for aberrant

CC prion protein. The method involves the use of guanidine thiocyanate

CC (gdnSCN) or its functional equivalent. This test is highly useful for

CC testing for transmissible spongiform encephalopathies (TSEs) such as

CC BSE (bovine spongiform encephalopathy). The method allows a faster,

CC simpler and more reliable method for monitoring cattle and sheep for

CC the presence of aberrant prion protein before it reaches the human

CC and animal food chain. In the invention antipeptide antibodies were

CC raised against sheep prion protein peptides. The present sequence is

CC the human prion protein sequence homologous to the sheep peptide

CC indicated.

XX Sequence 33 AA;

Query Match 93.2%; Score 41; DB 21; Length 33;

Best Local Similarity 77.8%; Pred. No. 0.36;

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
1 | | | | |  
Db 1 GSDYEDRY 9

RESULT 8  
AAB15058  
ID AAB15058 standard; Peptide: 33 AA.

XX AAB15058;

XX 18-DEC-2000 (first entry)

DE Cattle prion protein peptide homologous to ovine sequence 145-177.

XX Prion; PrP; guanidine thiocyanate; gdnSCN; TSE; BSE;

KW transmissible spongiform encephalopathy; antibody;

KW bovine spongiform encephalopathy; sheep; cattle; human.

XX Bos taurus.

XX WO200048003-A1.

XX 17-AUG-2000.

XX 09-FEB-2000; 2000WO-NL00079.

XX 11-FEB-1999; 99EP-0200391.

XX (DIEN-) STICHTING DIENST LANDBOUWKUNDIG ONDERZOE.

PI Garssen GJ, Jacobs JG, Langeveld JPM, Smits MA, Van Keulen LJM;

PI Schreuder BEC, Bossers A;

XX WPI; 2000-506099/45.

XX Use of guanidine thiocyanate for reducing risk of false-positive

PT results in testing mammalian sample for aberrant prion protein, useful

PT for detection of transmissible spongiform encephalopathies -

XX Disclosure; Fig 2; 49pp; English.

XX The present invention relates to a method for reducing the risk of

CC scoring a false positive test result in testing a sample for aberrant

CC prion protein. The method involves the use of guanidine thiocyanate

CC (gdnSCN) or its functional equivalent. This test is highly useful for

CC testing for transmissible spongiform encephalopathies (TSEs) such as

CC BSE (bovine spongiform encephalopathy). The method allows a faster,

CC simpler and more reliable method for monitoring cattle and sheep for

CC the presence of aberrant prion protein before it reaches the human

CC and animal food chain. In the invention antipeptide antibodies were

CC raised against sheep prion protein peptides. The present sequence is

CC the cattle prion protein sequence homologous to the sheep peptide

CC indicated.

XX Sequence 33 AA;

Query Match 93.2%; Score 41; DB 21; Length 33;

Best Local Similarity 77.8%; Pred. No. 0.36;

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
1 | | | | |  
Db 1 GSDYEDRY 9

RESULT 9

AAW17686  
ID AAW17686 standard; peptide: 142 AA.

XX AAW17686;

XX 14-JAN-1998 (first entry)

DE Prion protein peptide Hu 90-231.

XX Prion protein; PrP; alpha helical domain; screening; inhibition;

binding; scrapie; bovine spongiform encephalopathy; BSE; CJD;  
 Creutzfeldt-Jakob disease; Kuru; GSS; FFI; fatal familial insomnia;  
 Gerstmann-Strausler-Scheinker disease; hamster; human.  
 OS Homo sapiens.  
 XX MO9716728-A1.  
 PD 09-MAY-1997.  
 XX 28-OCT-1996; 96MO-US17462.  
 XX 02-NOV-1995; 95US-0556823.  
 XX (REGC ) UNITV CALIFORNIA.  
 XX Cohen FE, Kaneko K, Prusiner SB;  
 DR WPI; 1997-272248/24.  
 XX Prion proteins (PrPs) having at least one alpha-helical domain -  
 PT used in assays for screening compounds able to inhibit or decrease  
 PT the binding of PrP peptide(s) to cellular prion proteins or  
 PT peptide(s)  
 XX Claim 11; Page 7-38; 50pp; English.  
 XX The present sequence represents a prion protein (PrP) peptide.  
 CC PrP has an ability to induce a conformational change in cellular  
 CC prion protein (PrP-C). Methods, for screening compounds which  
 CC inhibit the binding of PrP-C to a PrP peptide, are used for screening  
 CC for drugs that may be useful in the treatment prion-related disease  
 CC e.g. scrapie, BSE (bovine spongiform encephalopathy), CJD  
 CC (Creutzfeldt-Jakob disease), Kuru, GSS (Gerstmann-Strausler-Scheinker  
 CC disease) and FFI (fatal familial insomnia).  
 XX Sequence 142 AA;  
 SO  
 Query Match 93.2%; Score 41; DB 18; Length 142;  
 Best Local Similarity 77.8%; Pred. No. 1.6;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1 GDXEDRY 9  
 Db 53 GSDYEDRY 61  
 RESULT 10  
 AAB07318  
 ID AAB07318 standard; protein; 208 AA.  
 XX AAB07318;  
 AC 17-OCT-2000 (first entry)  
 DT 17-OCT-2000 (first entry)  
 XX Human prion protein sequence.  
 DE Human prion protein sequence.  
 XX Human; prion protein; transmissible spongiform encephalopathy;  
 KW bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.  
 XX Homo sapiens.  
 OS  
 XX Key Location/Qualifiers  
 FT 29..69  
 FT /note= "Repeat region consisting of tandem repeats  
 FT of repeat unit: PHGGGWGQ (AAB07319)"  
 FT Disulfide-bond 157..192  
 FT Modified-site 208  
 FT /note= "C-terminal phospho-inositol glycolipid  
 FT membrane anchor (-GPI)"  
 XX WO200029850-A1.  
 XX

PD 25-MAY-2000.  
 XX 27-OCT-1999; 99MO-FI00897.  
 XX 17-NOV-1998; 98FI-0002481.  
 XX (WALL-) WALLAC OY.  
 PA (BBSR-) BBSRC OFFICE.  
 XX Hope J, Barnard GJR, Birckett CR;  
 PI WPI; 2000-387880/33.  
 DR Novel immunoassay for prion protein, used for the determination of  
 PT transmissible spongiform encephalopathies in bovines -  
 PT Disclosure: Page 43-44; 50pp; English.  
 XX The present sequence is the human prion protein (PrP) sequence.  
 CC Conversion of the normal cellular form of PrP into an aggregated,  
 CC insoluble isoform is implicated in the pathogenesis of transmissible  
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine  
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease  
 CC (CJD) and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration  
 CC of this protein in body fluid or tissue samples may be measured by an  
 CC assay of the present invention, in which a PrP epitope is captured by an  
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP  
 CC epitopes (AAB07320-H07326) are derived from the protease resistant core  
 CC of PrP that is occluded when the PrP is in an aggregated state.  
 XX Sequence 208 AA;  
 SO  
 Query Match 93.2%; Score 41; DB 21; Length 208;  
 Best Local Similarity 77.8%; Pred. No. 2.5;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1 GDXEDRY 9  
 Db 120 GSDYEDRY 128  
 RESULT 11  
 AAB07329  
 ID AAB07329 standard; protein; 208 AA.  
 XX AAB07329;  
 AC 17-OCT-2000 (first entry)  
 DT 17-OCT-2000 (first entry)  
 XX Human prion protein sequence.  
 DE Human prion protein sequence.  
 XX Human; prion protein; transmissible spongiform encephalopathy;  
 KW bovine spongiform encephalopathy; TSE diagnosis; PrP.  
 XX Homo sapiens.  
 OS  
 XX Key Location/Qualifiers  
 FT 29..69  
 FT /note= "Repeat region consisting of tandem repeats  
 FT of repeat unit: PHGGGWGQ (AAB07319)"  
 FT Disulfide-bond 157..192  
 FT Modified-site 208  
 FT /note= "C-terminal phospho-inositol glycolipid  
 FT membrane anchor (-GPI)"  
 XX WO200029849-A1.  
 XX 25-MAY-2000.  
 XX 27-OCT-1999; 99MO-FI00896.  
 XX 17-NOV-1998; 98FI-0002480.  
 XX

PA (WALL-) WALLAC OY.  
 PA (BBSR-) BBSRC OFFICE.  
 XX  
 PI Hope J, Barnard GJR, Birkett CR;  
 XX  
 DR WPI: 2000-399778/34.  
 XX  
 PT New immunoassay for prion protein, used for determination of  
 PT transmissible spongiform encephalopathies in mammals, comprises  
 PT specific capture antibody  
 XX  
 PS Disclosure: Page 43-44; 50pp; English.  
 XX  
 CC The present sequence is the human prion protein (Prp) sequence.  
 CC Conversion of the normal cellular form of Prp into an aggregated,  
 CC insoluble isoform is implicated in the pathogenesis of transmissible  
 CC spongiform encephalopathies (TSEs). Examples of TSEs include Bovine  
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease  
 CC (CJD) and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration  
 CC of this protein in body fluid or tissue samples may be measured by an  
 CC assay of the present invention, in which a Prp epitope is captured by an  
 CC antibody, which is then detected. The presence of Prp indicates TSE. Prp  
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core  
 CC of Prp that is occluded when the Prp is in an aggregated state.  
 CC  
 SQ Sequence 208 AA;  
 Query Match 93.2%; Score 41; DB 21; Length 208;  
 Best Local Similarity 77.8%; Pred. No. 2.5;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 OY 1 GDXEDRY 9  
 ID 120 GSDYEDRY 128  
 DB  
 RESULT 12  
 AAB07317  
 ID AAB07317 standard; protein; 217 AA.  
 AC AAB07317;  
 DT 17-OCT-2000 (first entry)  
 DE Cattle prion protein sequence.  
 XX  
 KM Cattle; prion protein; transmissible spongiform encephalopathy;  
 KM bovine spongiform encephalopathy; BSE diagnosis; TSE; Prp.  
 XX  
 OS Bos bovis.  
 XX  
 PH Key Location/Qualifiers  
 PH Region 37..79  
 FT /note= "Repeat region consisting of tandem repeats  
 FT of repeat unit: PHGGGQG (AAB07319)"  
 FT Disulfide-bond 166..201  
 FT Modified-site 217  
 FT /note= "C-terminal phospho-inositol glycolipid  
 FT membrane anchor (-GPI)"  
 FT  
 XX  
 PN WO200029850-A1.  
 PD 25-MAY-2000.  
 XX  
 PD 27-OCT-1999; 99WO-FI00897.  
 XX  
 PR 17-NOV-1998; 98FI-0002481.  
 XX  
 PA (WALL-) WALLAC OY.  
 PA (BBSR-) BBSRC OFFICE.  
 XX  
 PI Hope J, Barnard GJR, Birkett CR;  
 XX

DR WPI: 2000-387880/33.  
 XX  
 PT Novel immunoassay for prion protein, used for the determination of  
 PT transmissible spongiform encephalopathies in bovines  
 XX  
 PS Disclosure: Page 42-43; 50pp; English.  
 XX  
 CC The present sequence is the cattle prion protein (Prp) sequence.  
 CC Conversion of the normal cellular form of Prp into an aggregated,  
 CC insoluble isoform is implicated in the pathogenesis of transmissible  
 CC spongiform encephalopathies (TSEs). Examples of TSEs include Bovine  
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease  
 CC (CJD) and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration  
 CC of this protein in body fluid or tissue samples may be measured by an  
 CC assay of the present invention, in which a Prp epitope is captured by an  
 CC antibody, which is then detected. The presence of Prp indicates BSE. Prp  
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core  
 CC of Prp that is occluded when the Prp is in an aggregated state.  
 CC  
 SQ Sequence 217 AA;  
 Query Match 93.2%; Score 41; DB 21; Length 217;  
 Best Local Similarity 77.8%; Pred. No. 2.6;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 OY 1 GDXEDRY 9  
 ID 129 GSDYEDRY 137  
 DB  
 RESULT 13  
 AAB07328  
 ID AAB07328 standard; protein; 217 AA.  
 AC AAB07328;  
 DT 17-OCT-2000 (first entry)  
 DE Cattle prion protein sequence.  
 XX  
 KM Cattle; prion protein; transmissible spongiform encephalopathy;  
 KM bovine spongiform encephalopathy; TSE diagnosis; Prp.  
 XX  
 OS Bos bovis.  
 XX  
 PH Key Location/Qualifiers  
 PH Region 37..79  
 FT /note= "Repeat region consisting of tandem repeats  
 FT of repeat unit: PHGGGQG (AAB07319)"  
 FT Disulfide-bond 166..201  
 FT Modified-site 217  
 FT /note= "C-terminal phospho-inositol glycolipid  
 FT membrane anchor (-GPI)"  
 FT  
 XX  
 PN WO200029849-A1.  
 PD 25-MAY-2000.  
 XX  
 PD 27-OCT-1999; 99WO-FI00896.  
 XX  
 PR 17-NOV-1998; 98FI-0002480.  
 XX  
 PA (WALL-) WALLAC OY.  
 PA (BBSR-) BBSRC OFFICE.  
 XX  
 PI Hope J, Barnard GJR, Birkett CR;  
 XX  
 DR WPI: 2000-399778/34.  
 XX  
 PT New immunoassay for prion protein, used for determination of  
 PT transmissible spongiform encephalopathies in mammals, comprises  
 PT specific capture antibody  
 XX

PS Disclosure: Page 42-43; 50pp; English.

CC The present sequence is the cattle prion protein (PrP) sequence.

CC Conversion of the normal cellular form of PrP into an aggregated,

CC insoluble isoform is implicated in the pathogenesis of Transmissible

CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine

CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jacob disease

CC (CJD) and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration

CC of this protein in body fluid or tissue samples may be measured by an

CC assay of the present invention, in which a PrP epitope is captured by an

CC antibody, which is then detected. The presence of PrP indicates TSE. PrP

CC epitopes (AA07320-B07326) are derived from the protease resistant core

CC of PrP that is occluded when the PrP is in an aggregated state.

SQ Sequence 217 AA:

Query Match 93.2%; Score 41; DB 21; Length 217;

Best Local Similarity 77.8%; Pred. No. 2.6;

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9

DB 129 GSDYEDRY 137

RESULT 14

AAW70261

ID AAW70261 standard; Protein; 219 AA.

AC AAW70261;

XX 13-NOV-1998 (first entry)

DT

DE Bovine prion protein.

XX

OS Prion protein; PrP; cow; disease-specific prion protein; scrapie; Kuru;

XX prion disease detection; bovine spongiform encephalopathy; therapy;

XX Creutzfeldt-Jacob disease; Gerstmann-Strausler-Scheinker syndrome;

XX Fatal Familial Insomnia.

XX

OS Bos taurus.

XX

PN EP861900-A1.

XX

PD 02-SEP-1998.

XX

PF 21-FEB-1997; 97EP-0102837.

XX

PR 21-FEB-1997; 97EP-0102837.

XX

PA (ERZI-) ERZIEHUNGSDIREKTION CANTON ZURICH.

XX

PI Korth C, Moser M, Oesch B, Stierli B, Strelt P;

XX

DR WPI; 1998-449112/39.

XX

DR N-PSDB; AAV33005.

XX

XX

XX New monoclonal antibodies specifically bind to disease-specific

XX prion proteins - used to diagnose, prevent and treat prion diseases

XX e.g. bovine spongiform encephalopathy, scrapie and

XX Creutzfeldt-Jacob disease

XX

XX Disclosure: Page 20-21; 35pp; English.

XX

XX This sequence represents the bovine prion protein (PrP). The protein

XX is targeted by the antibody of the invention, which is a monoclonal

XX antibody or fragment capable of specifically binding to native and

XX denatured normal (PrP<sup>c</sup>) and disease-specific prion protein (PrP<sup>Sc</sup>) in an

XX antigen-antibody complex. The antibodies that immunoreact with

XX disease-specific prion proteins are used in test kits for the diagnosis

XX of prion diseases and to detect disease-specific PrP in biological

XX material by treatment of a probe of the material with proteinase K and

XX then with the monoclonal antibody. The monoclonal antibodies are used for

CC the prevention and treatment of prion diseases and to clear biological

CC material from prions. The antibodies are used to diagnose, treat and

CC prevent e.g. bovine spongiform encephalopathy, scrapie in sheep and

CC Creutzfeldt-Jacob disease, Gerstmann-Strausler-Scheinker syndrome, Fatal

CC Familial Insomnia and Kuru in humans. The diagnostic method allows mass

CC screening of infected cattle tissue at a subclinical stage and reduces

CC possible human health risks.

SQ Sequence 219 AA:

Query Match 93.2%; Score 41; DB 19; Length 219;

Best Local Similarity 77.8%; Pred. No. 2.6;

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9

DB 130 GSDYEDRY 138

RESULT 15

AAW93571

ID AAW93571 standard; Protein; 219 AA.

AC AAW93571;

XX 17-JUN-1999 (first entry)

DT

DE Bovine rPrP protein.

XX

XX Prion protein; PrP; rPrP; disease specific isoform; PrP(Sc); vaccine;

XX treatment; diagnosis; Scrapie; BSE; Kuru; Creutzfeldt-Jacob disease;

XX detection.

XX

OS Bos taurus.

XX

PN DE19741607-A1.

XX

XX 25-MAR-1999.

XX

PF 20-SEP-1997; 97DE-1041607.

XX

PR 20-SEP-1997; 97DE-1041607.

XX

PA (PRIO-) PRIONICS AG.

XX

PI Korth C, Moser M, Oesch B;

XX

DR WPI; 1999-205964/18.

XX

XX

XX New polypeptides comprising prion protein sequences - useful for

XX diagnosis or treatment of prion diseases e.g. scrapie, BSE and

XX Creutzfeldt-Jacob disease

XX

XX Claim 13; Page 6-7; 12pp; German.

XX

XX This invention describes a synthetic polypeptide comprising at least one

XX "defined" PrP (prion protein) sequence or sequences derived therefrom

XX CC that are recognised by a disease specific isoform of PrP, e.g. PrP(Sc),

XX binding substances. The new prion protein polypeptides are useful in

XX vaccines and pharmaceuticals for treatment of, and as diagnostic agents

XX for diagnosis of Scrapie, BSE, Kuru and Creutzfeldt-Jacob disease. The

XX polypeptides are also useful in pharmaceutical or chemical libraries for

XX detection of PrP(Sc)-specific agents.

XX

XX

SQ Sequence 219 AA:

Query Match 93.2%; Score 41; DB 20; Length 219;

Best Local Similarity 77.8%; Pred. No. 2.6;

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9

DB 130 GSDYEDRY 138

Wed Mar 26 09:13:00 2003

us-09-508-828b-1.rag

Page 9

Search completed: March 24, 2003, 17:19:40  
Job time : 26.6875 secs

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GenCore version 5.1.4.p5.4578  
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# OM protein - protein search, using sw model

Run on: March 24, 2003, 17:22:16 ; Search time 11.25 Seconds  
(without alignments)  
76.908 Million cell updates/sec

Title: US-09-508-828B-1  
Perfect score: 44  
Sequence: 1 GXDXEDRY 9

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues  
Total number of hits satisfying chosen parameters: 283224

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database :  
1: PIR\_73:\*  
2: PIR1:\*  
3: PIR2:\*  
4: PIR3:\*  
5: PIR4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	41	93.2	253	1 UJHU	major prion protel
2	41	93.2	253	1 I37032	major prion protel
3	41	93.2	253	1 I61847	major prion protel
4	41	93.2	253	2 S53635	prion protein - si
5	41	93.2	253	2 S53617	major prion protel
6	41	93.2	253	2 S53614	major prion protel
7	41	93.2	253	2 S53613	major prion protel
8	41	93.2	253	2 S53612	major prion protel
9	41	93.2	253	2 S53611	major prion protel
10	41	93.2	253	2 S53610	major prion protel
11	41	93.2	253	2 S53609	major prion protel
12	41	93.2	253	2 S53608	major prion protel
13	41	93.2	253	2 S53607	major prion protel
14	41	93.2	253	2 S53606	major prion protel
15	41	93.2	253	2 S53605	major prion protel
16	41	93.2	253	2 S53604	major prion protel
17	41	93.2	253	2 S53603	major prion protel
18	41	93.2	253	2 S53602	major prion protel
19	41	93.2	253	2 S53601	major prion protel
20	41	93.2	253	2 S53600	major prion protel
21	41	93.2	253	2 S53599	major prion protel
22	41	93.2	253	2 S53598	major prion protel
23	41	93.2	253	2 S53597	major prion protel
24	41	93.2	253	2 S53596	major prion protel
25	41	93.2	253	2 S53595	major prion protel
26	41	93.2	253	2 S53594	major prion protel
27	41	93.2	253	2 S53593	major prion protel
28	41	93.2	253	2 S53592	major prion protel
29	41	93.2	253	2 S53591	major prion protel

30	40	90.9	256	2 A54281	major prion protel
31	40	90.9	257	2 JQ1900	major prion protel
32	40	90.9	260	2 S53629	major prion protel
33	39	88.6	226	2 A53892	prion-related prot
34	39	88.6	254	1 UHYH	major prion PrP-Sc
35	39	88.6	254	2 A34759	prion protein - ch
36	39	88.6	254	2 B34759	prion protein - go
37	39	88.6	254	2 A23544	major prion protel
38	39	88.6	257	2 A23545	major prion PrP27-
39	33	75.0	468	2 T13725	terminase large ch
40	33	75.0	505	2 A97642	sugar transporter
41	33	75.0	512	2 AB2865	hypothetical prote
42	33	75.0	1459	2 T17186	CL3A protein - ra
43	33	75.0	1527	2 T17198	CL3A protein - ra
44	33	75.0	1550	2 T14327	alpha-latrotoxin r
45	32	72.7	685	2 JC6331	rho-type guanine e

## ALIGNMENTS

### RESULT 1

UJHU  
Major prion protein precursor - human  
N:Alternate names: 11K amyloid protein; 27-30Kialoglycoprotein; PrP 27-30; PrP 33-3  
C:Species: Homo sapiens (man)  
C:Date: 25-Oct-1987 #sequence-revision 12-Apr-1996 #text-change 16-Jun-2000  
C:Accession: A24173; A40372; A05017; S14078; I54322; I68597; I58135; I59184; I79633;  
R:Kretzschmar, H.A.; Stowring, L.E.; Westaway, D.; Stubblebine, W.H.; Prusiner, S.B.;  
DNA 5, 315-324, 1986  
A:Title: Molecular cloning of a human prion protein cDNA.  
A:Reference number: A24173; MUID:86300093; PMID:3755672  
A:Accession: A24173  
A:Molecule type: mRNA  
A:Residues: 1-253 <RES>  
A:Cross-references: GB:M13899; NID:g190467; PIDN:AAA60182.1; PID:g190468  
R:Puckett, C.; Concannon, P.; Casey, C.; Hood, L.  
Am. J. Hum. Genet. 49, 320-329, 1991  
A:Title: Genomic structure of the human prion protein gene.  
A:Reference number: A40372; MUID:91328137; PMID:1678248  
A:Accession: A40372  
A:Status: not compared with conceptual translation  
A:Molecule type: DNA  
A:Residues: 1-80, 89-253 <PUC>  
A:Cross-references: GB:X83416; NID:g747846; PIDN:CAA58442.1; PID:g747847  
R:Liaw, Y.C.; Lebo, R.V.; Clawson, G.A.; Smuckler, E.A.  
Science 233, 364-367, 1986  
A:Reference number: A05017; MUID:86261778; PMID:3014653  
A:Accession: A05017  
A:Molecule type: mRNA  
A:Residues: 8-117, 119-253 <LIA>  
A:Cross-references: GB:D00015; NID:g220015; PIDN:BAA00011.1; PID:g220016; GB:M13667;  
R:Tagliavini, F.; Prelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Far  
EMO J. 10, 513-519, 1991  
A:Title: Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana kindred)  
A:Reference number: S14078; MUID:91160504; PMID:1672107  
A:Accession: S14078  
A:Molecule type: protein  
A:Residues: 58-72, 'X', 74-76, 'XX', 79, 'XXX', 83-86, 111-128, 'V', 130-150 <TAG>  
R:Diedrich, J.F.; Knopman, D.S.; List, J.F.; Olson, K.; Frey, W.H.  
Hum. Mol. Genet. 1, 443-444, 1992  
A:Title: Deletion in the prion protein gene in a demented patient.  
A:Reference number: I54322; MUID:93250789; PMID:1363802  
A:Accession: I54322  
A:Status: preliminary; translated from GB/EMBL/DBJ  
A:Molecule type: DNA  
A:Residues: 9-83, 92-240 <RES>  
A:Cross-references: GB:M61929; NID:g190517; PIDN:AA59442.1; PID:g190518  
A:Accession: I68597  
A:Status: translated from GB/EMBL/DBJ  
A:Molecule type: DNA  
A:Residues: 8-240 <RES>

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A:Cross-references: GB:MB1930; NID:g190519; PIDN:AA859443.1; PID:g190520
R:Brown, P.; Goldfarb, L.G.; McCombie, W.R.; Nieto, A.; Squillacote, D.; Sheremata, W.;
Neurology 42, 422-427, 1992
A:Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutation
A:Reference number: 158135; MUID:921405671; PMID:1736177
A:Accession: 158135
A:Status: preliminary; translated from GB/EMBL/DBDJ
A:Molecule type: DNA
A:Residues: 51-91; 'PHGGGNGOPHHGGMGOPHHGGGNGOPHHGGMGOPHHGGG' <RES>
A:Cross-references: GB:S80539; NID:g244698; PIDN:AA821334.1; PID:g244699
R:Goldfarb, L.G.; Brown, P.; McCombie, W.R.; Goldgaber, D.; Swergold, G.D.; Wills, P.R.;
Proc Natl. Acad. Sci. U.S.A. 86, 10926-10930, 1991
A:Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven, a
A:Reference number: 159184; MUID:92073400; PMID:1683708
A:Accession: 159184
A:Status: translated from GB/EMBL/DBDJ
A:Molecule type: DNA
A:Residues: 60-67 <GOL>
A:Cross-references: GB:S71208; NID:g239877; PIDN:AA820521.1; PID:g239878; GB:S71210; NID:
C:Genetics:
A:Gene: GDB:PRNP; CJD; PRIP
A:Cross-references: GDB:120720; OMIM:176640; OMIM:137440
A:Map position: 20pter-20p12
A:Introns: #status absent
A>Note: one intron occurs before the initiator codon
C:Superfamily: major prion protein
C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidyl
F:1-22/Domain: signal sequence #status predicted <SIG>
F:23-230/Product: major prion protein #status predicted <MAT>
F:54-92/Region: 8-residue repeats (P-H-G-G-G-W-G-Q)
F:112-134/Domain: transmembrane #status predicted <TM>
F:231-253/Domain: carboxyl-terminal propeptide #status predicted <CTP>
F:179-214/Dsulfide bonds: #status predicted
F:181.19//Binding site: carbonylate (Asn) (covalent) #status predicted
F:230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match          93.2%  Score 41;  DB 1;  Length 253;
Best Local Similarity 77.8%  Pred. NO. 0.42;
Matches 7;  Conservative 0;  Mismatches 2;  Indels 0;  Gaps 0;

OY 1 GAXDEDRY 9
    | | | | |
Db 142 GSDYEDRY 150

RESULT 2
137032
Major prion protein precursor - gorilla
C:Species: Gorilla gorilla (gorilla)
C:Date: 31-May-1996 #sequence_rev150n 31-May-1996 #text_change 13-Aug-1999
C:Accession: 137032
R:Cervanukova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A:Title: Infectious amyloid precursor gene sequences in primates used for experimental t
A:Reference number: 136907; MUID:95083661; PMID:7991600
A:Accession: 137032
A:Status: preliminary; translated from GB/EMBL/DBDJ
A:Molecule type: DNA
A:Residues: 1-253 <RES>
A:Cross-references: EMBL:U15166; NID:g563208; PIDN:AAA68633.1; PID:g563209
C:Superfamily: major prion protein

Query Match          93.2%  Score 41;  DB 2;  Length 253;
Best Local Similarity 77.8%  Pred. NO. 0.42;
Matches 7;  Conservative 0;  Mismatches 2;  Indels 0;  Gaps 0;

OY 1 GAXDEDRY 9
    | | | | |
Db 142 GSDYEDRY 150

```

```

161847
major prion protein precursor - chimpanzee
C:Species: Pan troglodytes (chimpanzee)
C:Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 13-Aug-1999
C:Accession: 161847; S71060; S53615
R:CervenaKova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R
Proc. Natl. Acad. Sci. U.S.A. 91, 12155-12162, 1994
A:Title: Infectious amyloid precursor gene sequences in primates used for experimental
A:Reference number: 136907; MUID:95083661; PMID:7991600
A:Accession: 161847
A:Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 1-253 <RES>
A:Cross-references: EMBL:U15039; NID:g609303; PIDN:AAA8632.1; PID:g609304
R:Schatz, H.M.
Submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71060
A:Molecule type: DNA
A:Residues: 1-253 <SCW>
A:Cross-references: EMBL:U08296; NID:g474350; PIDN:AAC50085.1; PID:g474351
R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53615
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-210, 'R', 212-253 <SCH>
A:Cross-references: EMBL:U08296
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane

Query Match
Best Local Similarity 77.8%; Score 41; DB 2; Length 253;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
| | | | |
Db 142 GSDYEDRY 150

RESULT 4
S53635
prion protein - siamang
C:Species: Hylobates syndactylus (siamang)
C:Date: 15-Jul-1995 #sequence_revision 19-Apr-1996 #text_change 13-Aug-1999
C:Accession: S53635
R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53635
A:Status: nucleic acid sequence not shown; translation not shown
A:Molecule type: DNA
A:Residues: 1-253 <SCH>
A:Cross-references: EMBL:U08308; NID:g474374; PIDN:AAC50096.1; PID:g474375
A:Note: the source was designated as Symphalangis syndactylus
A:Note: the nucleotide sequence was submitted to the EMBL Data Library, April 1994
C:Superfamily: major prion protein

Query Match
Best Local Similarity 73.2%; Score 41; DB 2; Length 253;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
| | | | |
Db 142 GSDYEDRY 150

```

### RESULT 3

RESULT 5  
S53617  
major prion protein - common gibbon



C:Species: Hylobates lar (common gibbon, white-handed gibbon)  
 C>Date: 14-Feb-1997 #sequence\_revision 14-Feb-1997 #text\_change 13-Aug-1999  
 C:Accession: S53617; S71050  
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 J. Mol. Biol. 245, 362-374, 1995  
 A:Title: Prion protein gene variation among primates.  
 A:Reference number: S53614; MUID:95139066; PMID:7837269  
 A:Accession: S53617  
 A:Status: nucleic acid sequence not shown  
 A:Molecule type: DNA  
 A:Residues: 1-253 <SCM>  
 A:Cross-references: EMBL:008299  
 R:Schatz, H.M.  
 submitted to the EMBL Data Library, April 1994  
 A:Reference number: S71041  
 A:Accession: S71050  
 A:Molecule type: DNA  
 A:Residues: 1-210, 'E', 212-253 <SCM>  
 A:Cross-references: EMBL:008299; PIDN:AAC50088.1; PID:g474357  
 C:Superfamily: major prion protein  
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane protein

Query Match 93.2%; Score 41; DB 2; Length 253;  
 Best Local Similarity 77.8%; Pred. No. 0.42;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
 | | | | |  
 Db 142 GSDYEDRY 150

RESULT 6  
 S53614  
 major prion protein - gorilla  
 C:Species: gorilla gorilla (gorilla)  
 C>Date: 28-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 13-Aug-1999  
 C:Accession: S53614; S71049  
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 J. Mol. Biol. 245, 362-374, 1995  
 A:Title: Prion protein gene variation among primates.  
 A:Reference number: S53614; MUID:95139066; PMID:7837269  
 A:Accession: S53614  
 A:Status: nucleic acid sequence not shown  
 A:Molecule type: DNA  
 A:Residues: 1-253 <SCM>  
 A:Cross-references: EMBL:008300  
 R:Schatz, H.M.  
 submitted to the EMBL Data Library, April 1994  
 A:Reference number: S71041  
 A:Accession: S71049  
 A:Molecule type: DNA  
 A:Residues: 1-210, 'E', 212-253 <SCM>  
 A:Cross-references: EMBL:008300; PIDN:g474358; PIDN:AAC50089.1; PID:g474359  
 C:Superfamily: major prion protein  
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane protein

Query Match 93.2%; Score 41; DB 2; Length 253;  
 Best Local Similarity 77.8%; Pred. No. 0.42;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
 | | | | |  
 Db 142 GSDYEDRY 150

RESULT 7  
 S37137  
 prion protein - greater kudu  
 C:Species: Tragelaphus strepsiceros (greater kudu)  
 C>Date: 06-Jan-1995 #sequence\_revision 06-Jan-1995 #text\_change 13-Aug-1999  
 C:Accession: S37137  
 R:Marlin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.  
 submitted to the EMBL Data Library, August 1993

A:Reference number: S37137  
 A:Accession: S37137  
 A:Status: preliminary  
 A:Molecule type: DNA  
 A:Residues: 1-264 <MAR>  
 A:Cross-references: EMBL:X74771; NID:g398937; PIDN:CAA52781.1; PID:g398938  
 C:Superfamily: major prion protein

Query Match 93.2%; Score 41; DB 2; Length 264;  
 Best Local Similarity 77.8%; Pred. No. 0.44;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
 | | | | |  
 Db 153 GSDYEDRY 161

RESULT 8  
 A54330  
 major prion protein 1 precursor - bovine  
 N:Alternate names: prion protein, long variant, PrP protein  
 C:Species: Bos primigenius taurus (cattle)  
 C>Date: 09-Sep-1994 #sequence\_revision 09-Sep-1994 #text\_change 02-Mar-2001  
 C:Accession: A54330; J0953; J0952; A48551; S07347; I46931  
 R:Goldmann, W.; Hunter, N.; Marlin, T.; Dawson, M.; Hope, J.  
 J. Gen. Virol. 72, 201-204, 1991  
 A:Title: Different forms of the bovine PrP gene have five or six copies of a short, G  
 A:Reference number: A54330; MUID:91116314; PMID:1671225  
 A:Accession: A54330  
 A:Molecule type: DNA  
 A:Residues: 1-264 <GOU>  
 A:Cross-references: GB:X55882; NID:g683; PIDN:CAA39368.1; PID:g684  
 R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shimagawa, M.  
 submitted to JIPID, November 1991  
 A:Reference number: J0952  
 A:Accession: J0953  
 A:Molecule type: DNA  
 A:Residues: 1-264 <YOS>  
 A:Cross-references: GB:D10613; NID:g217595; PIDN:BA01468.1; PID:g217596  
 A:Accession: J0952  
 A:Molecule type: DNA  
 A:Residues: 1-217, 'K', 219-264 <Y02>  
 R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shimagawa, M.  
 Virus Genes 6, 343-356, 1992  
 A:Title: Comparative sequence analysis and expression of bovine PrP gene in mouse L-9  
 A:Reference number: A48551; MUID:93118243; PMID:1362024  
 A:Accession: A48551  
 A:Molecule type: mRNA  
 A:Residues: 1-217, 'K', 219-264 <Y03>  
 A:Cross-references: GB:AB001468; NID:g1888342; PIDN:BA19253.1; PID:g1888343  
 A:Experimental source: brain  
 A>Note: sequence extracted from NCBI backbone (NCBI:121620, NCBI:121621)  
 R:Hope, J.; Reekie, L.J.D.; Hunter, N.; Mulhaur, G.; Beyreuther, K.; White, H.; Scott  
 Nature 336, 390-392, 1988  
 A:Title: Fibrils from brains of cows with new cattle disease contain scrapie-associated  
 A:Reference number: S07347; MUID:89057122; PMID:2904126  
 A:Accession: S07347  
 A:Molecule type: protein  
 A:Residues: 25-36 <ROP>  
 R:Prusiner, S.B.; Puzi, M.; Scott, M.; Serban, D.; Serban, H.; Taraboulos, A.; Gabriele  
 J. Infect. Dis. 167, 602-613, 1993  
 A:Title: Immunologic and molecular biologic studies of prion proteins in bovine spong  
 A:Reference number: I46931; MUID:93179783; PMID:8440932  
 A:Accession: I46931  
 A:Status: preliminary; translated from GB/EMBL/DBJ  
 A:Molecule type: mRNA  
 A:Residues: 1-264 <PRD>  
 A:Cross-references: GB:S55629; NID:g266111; PIDN:AB25514.1; PID:g266112  
 C:Genetics:  
 A:Gene: PrP  
 C:Superfamily: major prion protein  
 C:Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat  
 F:1-24/Domain: signal sequence #status predicted <SIG>

F:25-264/Product: major prion protein 1 #status predicted <M>  
F:60-99/Region: 8-residue repeats (W-G-Q-P-H-G-G)  
F:190-225/Disulfide bonds: #status predicted  
F:192,208/Binding site: carbohydrate (asn) (covalent) #status predicted

Query Match 93.2%; Score 41; DB 2; Length 264;  
Best Local Similarity 77.8%; Pred. No. 0.44;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
| | | | |  
Db 153 GSDYEDRY 161

## RESULT 9

major prion protein - black-handed spider monkey (fragment)

C:Species: Ateles geoffroyi (black-handed spider monkey)

C>Date: 27-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 13-Aug-1999

C:Accession: S71041; S53630

R:Schatz, H.M.

Submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71041

A:Molecule type: DNA

A:Residues: 1-232 <SCH>

A:Cross-references: EMBL:U08309; NID:9474376; PIDN:AAC50097.1; PID:9474377

R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53630

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-194, 'R', 196-231 <SCW>

A:Cross-references: EMBL:U08309

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane pro

Query Match 90.9%; Score 40; DB 2; Length 232;  
Best Local Similarity 77.8%; Pred. No. 0.62;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
| | | | |  
Db 126 GNDYEDRY 134

## RESULT 10

major prion protein - douroucouli (fragment)

C:Species: Aotus trivirgatus (douroucouli, night monkey, owl monkey)

C>Date: 28-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 13-Aug-1999

C:Accession: S53633; S71042

R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53633

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-239 <SCH>

A:Cross-references: EMBL:U08293

R:Schatz, H.M.

Submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71041

A:Molecule type: DNA

A:Residues: 1-202, 'E', 204-239 <SCW>

A:Cross-references: EMBL:U08293; NID:9474344; PIDN:AAC50092.1; PID:9474345

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane pro

Query Match 90.9%; Score 40; DB 2; Length 239;  
Best Local Similarity 77.8%; Pred. No. 0.64;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
| | | | |  
Db 134 GNDYEDRY 142

## RESULT 11

major prion protein - mandrill (fragment)

C:Species: Papio sphinx, Mandrillus sphinx (mandrill)

C>Date: 27-Oct-1996 #sequence\_revision 14-Feb-1997 #text\_change 13-Aug-1999

C:Accession: S71056; S53621

R:Schatz, H.M.

Submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71056

A:Molecule type: DNA

A:Residues: 1-241 <SCH>

A:Cross-references: EMBL:U08303; NID:9474364; PIDN:AAC50091.1; PID:9474365

R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53621

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-203, 'R', 205-240 <SCW>

A:Cross-references: EMBL:U08303

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane

Query Match 90.9%; Score 40; DB 2; Length 241;  
Best Local Similarity 77.8%; Pred. No. 0.64;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
| | | | |  
Db 135 GNDYEDRY 143

## RESULT 12

major prion protein - Calliobus moloch (fragment)

C:Species: Calliobus moloch

C>Date: 27-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 13-Aug-1999

C:Accession: S71048; S53632

R:Schatz, H.M.

Submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71048

A:Molecule type: DNA

A:Residues: 1-241 <SCH>

A:Cross-references: EMBL:U08312; NID:9475585; PIDN:AAC50100.1; PID:9475586

R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53632

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-203, 'R', 205-240 <SCW>

A:Cross-references: EMBL:U08312

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane

Query Match 90.9%; Score 40; DB 2; Length 241;  
Best Local Similarity 77.8%; Pred. No. 0.64;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9

DB 135 GNDYEDRY 143

## RESULT 13

major prion protein - green monkey  
S53627  
C:Species: Cercopithecus aethiops (green monkey, grivet)  
C>Date: 28-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 13-Aug-1999  
C:Accession: S53627; S71043  
R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
J. Mol. Biol. 245, 362-374, 1995  
A:Title: Prion protein gene variation among primates.  
A:Reference number: S53614; MUID:95139066; PMID:7837269  
A:Accession: S53627  
A:Status: nucleic acid sequence not shown  
A:Molecule type: DNA  
A:Residues: 1-245 <SCH>  
A:Cross-references: EMBL:U08291; NID:9474340; PIDN:AAC50080.1; PID:9474341  
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane pro

Query Match 90.9%; Score 40; DB 2; Length 245;  
Best Local Similarity 77.8%; Pred. No. 0.65;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GNDYEDRY 9  
DB 134 GNDYEDRY 142

## RESULT 14

S71045  
major prion protein - Cercopithecus diana  
C:Species: Cercopithecus diana  
C>Date: 14-Feb-1997 #sequence\_revision 14-Feb-1997 #text\_change 13-Aug-1999  
C:Accession: S71045; S53628  
R:Schatzl, H.M.  
\* submitted to the EMBL Data Library, April 1994  
A:Reference number: S71041  
A:Accession: S71045  
A:Molecule type: DNA  
A:Residues: 1-245 <SCH>  
A:Cross-references: EMBL:U08292; NID:9474342; PIDN:AAC50081.1; PID:9474343  
R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
J. Mol. Biol. 245, 362-374, 1995  
A:Title: Prion protein gene variation among primates.  
A:Reference number: S53614; MUID:95139066; PMID:7837269  
A:Accession: S53628  
A:Status: nucleic acid sequence not shown  
A:Molecule type: DNA  
A:Residues: 8-10, 'L', 12-202, 'R', 204-239 <SCW>  
A:Cross-references: EMBL:U08292  
C:Superfamily: major prion protein  
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane pro

Query Match 90.9%; Score 40; DB 2; Length 245;  
Best Local Similarity 77.8%; Pred. No. 0.65;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GNDYEDRY 9  
DB 134 GNDYEDRY 142

## RESULT 15

161848  
major prion protein precursor - common squirrel monkey  
C:Species: Saimiri sciureus (common squirrel monkey)  
C>Date: 31-May-1996 #sequence\_revision 31-May-1996 #text\_change 13-Aug-1999  
C:Accession: 161848  
R:Cervenakova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.  
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994  
A:Title: Infectious amyloid precursor gene sequences in primates used for experimental  
A:Reference number: 136907; MUID:95083661; PMID:7991600  
A:Accession: 161848  
A:Status: preliminary; translated from GB/EMBL/DBJ  
A:Molecule type: DNA  
A:Residues: 1-252 <RES>  
A:Cross-references: EMBL:U15165; NID:9595852; PIDN:AA68636.1; PID:9595853  
C:Superfamily: major prion protein

Query Match 90.9%; Score 40; DB 2; Length 252;  
Best Local Similarity 77.8%; Pred. No. 0.68;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GNDYEDRY 9  
DB 141 GNDYEDRY 149

Search completed: March 24, 2003, 17:24:13  
Job time : 12.25 secs



GenCore version 5.1.4.p5.4578  
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OM protein - protein search, using sw model

Run on: March 24, 2003, 17:17:23 ; Search time 5.4375 Seconds

(without alignments)  
68,650 Million cell updates/sec

Title: US-09-508-828B-1

Perfect score: 44

Sequence: 1 GDXEDRYX 9

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt\_40.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	41	93.2	253	1	P40252 gorilla gor
2	41	93.2	253	1	P04156 homo sapien
3	41	93.2	253	1	P40253 pan troglod
4	41	93.2	256	1	P40243 traglaphus
5	41	93.2	257	1	P49927 sus scrofa
6	41	93.2	264	1	P10229 bos taurus
7	41	93.2	264	1	P40242 traglaphus
8	41	93.2	232	1	P40246 atelaf geof
9	40	90.9	238	1	P05145 cercopithec
10	40	90.9	238	1	P05270 theropithec
11	40	90.9	239	1	P40245 aotus trivi
12	40	90.9	241	1	P40248 callipecus
13	40	90.9	241	1	P40255 mandillius
14	40	90.9	245	1	P40250 cercopithec
15	40	90.9	246	1	P05172 cercopithec
16	40	90.9	246	1	P05174 cercopithec
17	40	90.9	252	1	P51446 atelaf panl
18	40	90.9	252	1	P40247 atelafhrix
19	40	90.9	252	1	P40249 cebus apell
20	40	90.9	252	1	P05211 orycolagus
21	40	90.9	253	1	P40251 colobus gue
22	40	90.9	253	1	P40256 macaca fasc
23	40	90.9	253	1	P40256 pongo pygma
24	40	90.9	253	1	P40257 presbytis f
25	40	90.9	255	1	P79141 camelus dro
26	40	90.9	256	1	P52113 capra hircu
27	40	90.9	256	1	P79142 cervus elap
28	40	90.9	256	1	P18754 felis silve
29	40	90.9	256	1	P47852 odocolleus
30	40	90.9	256	1	P23907 ovif aries
31	40	90.9	256	1	P01880 bos taurus
32	40	90.9	257	1	P52114 mustela put
33	40	90.9	257	1	P40244 mustela vis

34	40	90.9	260	1	P40258 salmistr scl
35	39	88.6	254	1	P06506 cricetus
36	39	88.6	254	1	P04668 cricetus
37	39	88.6	254	1	P04273 mesocricetu
38	39	88.6	254	1	P04925 mus musculu
39	39	88.6	254	1	P13852 rattus norv
40	39	88.6	254	1	P02073 signodon hl
41	39	88.6	255	1	P46501 canis faml
42	36	81.8	246	1	P05176 cercopithec
43	36	81.8	259	1	P51780 trichosurus
44	32	72.7	754	1	P28056 bos taurus
45	31	70.5	331	1	P082314 arabidopsis

## ALIGNMENTS

RESULT 1  
PRIO\_GORGO  
ID PRIO\_GORGO STANDARD; PRT; 253 AA.  
AC P40252; Q28419;  
DT 01-FEB-1995 (Rel. 31, Created)  
DT 01-FEB-1995 (Rel. 31, Last sequence update)  
DT 15-JUL-1998 (Rel. 36, Last annotation update)  
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).  
GN PRNP.  
OS Gorilla gorilla gorilla (Lowland gorilla).  
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Gorilla.  
OX NCBI\_TaxID=9595;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=95139066; PubMed=7837269;  
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;  
RT "Prion protein gene variation among primates.";  
RL J. Mol. Biol. 245:362-374(1995).  
RN [2]  
RP SEQUENCE FROM N.A.  
RC TISSUE=Blood;  
RX MEDLINE=95083661; PubMed=7991600;  
RA Cervenakova L., Brown P., Goldfarb L.G., Nagle J., Petrone K.,  
RT Rubenstein R., Dubnick M., Gibbs C.J., Gajdusek D.C.;  
RT "Infectious amyloid precursor gene sequences in primates used for  
RT experimental transmission of human spongiform encephalopathy.";  
RL Proc. Natl. Acad. Sci. U.S.A. 91:12159-12162(1994).  
CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
CC "FODS".  
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME  
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
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CC or send an email to [license@sib-sib.ch](mailto:license@sib-sib.ch)).  
CC  
CC EMBL: U08300; AAC50089.1; -;  
CC EMBL: U15166; AAA68633.1; -;  
CC HSSP: P04156; 101Z;  
DR InterPro: IPR00817; Prion.  
DR Pfam: PF00377; prion; 1.  
DR PRINTS: PR00341; PRION.  
DR SMART: SM00157; PRP; 1.  
DR PROSITE: PS00291; PRION\_1; 1.

DR PROSITE: PS00706; PRION\_2; 1.  
 RA P101; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT SIGNAL 1 22  
 FT CHAIN 23 230  
 FT PROPEP 231 253  
 FT LIPID 230 230  
 FT DISULFID 179 214  
 FT CARBOHYD 181 214  
 FT CARBOHYD 197 197  
 FT DOMAIN 51 91  
 FT REPEAT 51 59  
 FT REPEAT 67 67  
 FT REPEAT 68 75  
 FT REPEAT 76 83  
 FT REPEAT 84 91  
 FT CONFLICT 6 6  
 SQ SEQUENCE 253 AA; 27660 MW; E28F4C3PAAACAA9E CRC64;  
 Query Match 93.2%; Score 41; DB 1; Length 253;  
 Best Local Similarity 77.8%; Pred. No. 0.2;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1 GXDXEDRY 9  
 DB 142 GSDYEDRY 150  
 RESULT 2  
 ID PRIO\_HUMAN STANDARD: PRT: 253 AA.  
 AC P04156;  
 DT 01-NOV-1986 (Rel. 03, Created)  
 DT 01-NOV-1986 (Rel. 03, Last sequence update)  
 DT 13-JUN-2002 (Rel. 41, Last annotation update)  
 DE Major prion protein precursor (Prp) (Prp23-30) (Prp23-35C) (ASCR)  
 DE (CD230 antigen).  
 DE PRNP.  
 OS Homo sapiens (Human).  
 OC Eukaryote; Metazoa; Chordata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.  
 OX NCBI\_TaxID=9606;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=66300093; PubMed=3755672;  
 RA Kretzschmar H.A.; Stowling L.E.; Westaway D.; Stubblebine W.H.;  
 RA Prusiner S.B.; Dearmond S.O.;  
 RT "Molecular cloning of a human prion protein cDNA."  
 RL DNA 5:315-324(1986).  
 RN [2]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=21638749; PubMed=11780052;  
 RA Delouis P.; Matthews L.H.; Ashurst J.; Burton J.; Gilbert J.G.R.;  
 RA Jones M.; Stavrides G.; Almeida J.P.; Babbage A.K.; Bagguley C.L.;  
 RA Bailey J.; Bartlow K.F.; Bates K.N.; Beard L.M.; Beare D.M.;  
 RA Beasley O.P.; Bird C.P.; Blakey S.E.; Bridgman A.M.; Brown A.J.;  
 RA Buck D.; Burrill W.D.; Butler A.P.; Carder C.; Carter N.P.;  
 RA Chapman J.C.; Clamp M.; Clark G.; Clark L.N.; Clark S.Y.; Clee C.M.;  
 RA Clegg S.; Cobley V.E.; Collier R.E.; Connor R.E.; Corby N.R.;  
 RA Coulson A.; Coville G.J.; Deelman R.; Dhami P.D.; Dunn M.;  
 RA Ellington A.G.; Franklin J.A.; Fraser A.; French L.; Garner P.;  
 RA Grafton D.V.; Griffiths C.; Griffiths M.N.D.; Gilliam R.; Hall R.E.;  
 RA Hammond S.; Harley J.L.; Heath P.D.; Ho S.; Holden J.L.; Howden P.J.;  
 RA Huckle E.; Hunt A.R.; Hunt S.E.; Jekosch K.; Johnson C.M.; Johnson D.;  
 RA Kay M.P.; Kimberley A.M.; King A.; Knights A.; Laird G.K.; Lawlor S.;  
 RA Levasseleho M.H.; Levesha M.A.; Lloyd C.; Lloyd D.M.; Lovell J.D.;  
 RA Marsh V.L.; Martin S.L.; McConnachie L.J.; McLeay K.; Murray A.A.;  
 RA Milne S.A.; Mistry D.; Moore M.J.F.; Mullikin J.C.; Nickerson T.;  
 RA Oliver K.; Parker A.; Patel R.; Pearce T.A.V.; Peck A.I.;  
 RA Phillimore B.J.C.T.; Prathalingam S.R.; Plumb R.W.; Ramsay H.;  
 RA Rice C.M.; Ross M.T.; Scott C.E.; Selva H.K.; Shonkhen R.; Sims S.;  
 RA Sruce C.D.; Smith M.L.; Soderlund C.; Steward C.A.; Sulston J.E.;  
 RA Swann R.M.; Sycamore N.; Taylor R.; Tee L.; Thomas D.W.; Thorpe A.

RA Tracey A.; Tromans A.C.; Vaudin M.; Wall M.; Wallis J.M.;  
 RA Whitehead S.L.; Whitaker P.; Willey D.L.; Williams L.; Williams S.A.;  
 RA Wilning L.; Wray P.W.; Hubbard T.; Durbin R.M.; Bentley D.R.; Beck S.;  
 RA Rogers J.;  
 RT "The DNA sequence and comparative analysis of human chromosome 20."  
 RL Nature 414:865-871(2001).  
 RN [3]  
 RP SEQUENCE OF 8-253 FROM N.A.  
 RX MEDLINE=86261778; PubMed=3014653;  
 RA Liao Y.-C.J.; Lebo R.V.; Clawson G.A.; Smuckler E.A.;  
 RA Prusiner S.B.; Farlow M.R.; Ghetti B.; Frangione B.;  
 RT "Human prion protein cDNA: molecular cloning, chromosomal mapping,  
 RT and biological implications."  
 RL Science 233:364-367(1986).  
 RN [4]  
 RP SEQUENCE OF 58-85 AND 111-150 (VARIANT AMYLOID GSS).  
 RX MEDLINE=91160504; PubMed=1672107;  
 RA Tagliavini F.; Prelli F.; Ghiso J.; Bugiani O.; Serban D.;  
 RA Prusiner S.B.; Farlow M.R.; Ghetti B.; Frangione B.;  
 RT "Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana  
 RT kindred) is an 11 kd fragment of prion protein with an N-terminal  
 RT glycine at codon 58."  
 RL EMBO J. 10:513-519(1991).  
 RN [5]  
 RP STRUCTURE BY NMR OF 23-230.  
 RX MEDLINE=20087216; PubMed=10618385;  
 RA Zahn R.; Liu A.; Luhrs T.; Riek R.; von Schroetter C.;  
 RA Lopez Garcia F.; Billeter M.; Calzolari L.; Wider G.; Wuthrich K.;  
 RT "NMR solution structure of the human prion protein."  
 RL Proc. Natl. Acad. Sci. U.S.A. 97:145-150(2000).  
 RN [6]  
 RP STRUCTURE BY NMR OF 118-221.  
 RX MEDLINE=20359708; PubMed=10900000;  
 RA Calzolari L.; Lysek D.A.; Guntert P.; von Schroetter C.; Riek R.;  
 RA Zahn R.; Wuthrich K.;  
 RT "NMR structures of three single-residue variants of the human prion  
 RT protein."  
 RL Proc. Natl. Acad. Sci. U.S.A. 97:8340-8345(2000).  
 RN [7]  
 RP REVIEW ON VARIANTS.  
 RX MEDLINE=93372867; PubMed=8364585;  
 RA Palmer M.S.; Collinge J.;  
 RT "Mutations and polymorphisms in the prion protein gene."  
 RL Hum. Mutat. 2:168-173(1993).  
 RN [8]  
 RP REVIEW ON VARIANTS.  
 RX MEDLINE=94029646; PubMed=8105771;  
 RA Prusiner S.B.;  
 RT "Genetic and infectious prion diseases."  
 RL Arch. Neurol. 50:1129-1133(1993).  
 RN [9]  
 RP VARIANT GSS LEU-102.  
 RX MEDLINE=89159433; PubMed=2564168;  
 RA Hsiao K.; Baker H.F.; Crow T.J.; Poulter M.; Owen F.;  
 RA Terwilliger J.D.; Westaway D.; Ott J.; Prusiner S.B.;  
 RT "Linkage of a prion protein missense variant to Gerstmann-Strausler  
 RT syndrome."  
 RL Nature 338:342-345(1989).  
 RN [10]  
 RP VARIANTS LEU-102; VAL-117 AND VAL-129.  
 RX MEDLINE=89392018; PubMed=2783132;  
 RA Doh-Ura K.; Tateishi J.; Sasaki H.; Kitamoto T.; Sakaki Y.;  
 RT "Pro->Leu change at position 102 of prion protein is the most  
 RT common but not the sole mutation related to Gerstmann-Strausler  
 RT syndrome."  
 RL Blochem. Biophys. Res. Commun. 163:974-979(1989).  
 RN [11]  
 RP VARIANT FFI ASN-178.  
 RX MEDLINE=92195483; PubMed=1347910;  
 RA Medori R.; Montagna P.; Tritschler H.J.; Leblanc A.; Cortelli P.;  
 RA Tinuper P.; Lugaresi E.; Gambetti P.;  
 RT "Fatal familial insomnia: a second kindred with mutation of prion  
 RT protein gene at codon 178."  
 RL Neurology 42:669-670(1992).

RN [121]  
 RP VARIANT CJD ASN-178.  
 RX MEDLINE-91124933; PubMed-1671440;  
 RA Goldfarb L.G., Haltia M., Brown P., Nieto A., Koranen J.,  
 RA McComb W.R., Trapp S., Gajdusek D.C.;  
 RT "New mutation in scrapie amyloid precursor gene (at codon 178) in  
 RT Finnish Creutzfeldt-Jakob kindred.";  
 RL Lancet 337:425-425(1991).  
 RN [13]  
 RP VARIANT CJD LYS-200.  
 RX MEDLINE-90355709; PubMed-1975028;  
 RA Goldfarb L., Miltova E., Brown P., Toh B.K., Gajdusek D.C.;  
 RT "Mutation in codon 200 of scrapie amyloid protein gene in two clusters  
 RT of Creutzfeldt-Jakob disease in Slovakia.";  
 RL Lancet 336:514-515(1990).  
 RN [14]  
 RP VARIANT GSS ARG-217.  
 RX MEDLINE-93250977; PubMed-1363810;  
 RA Hsiao K., Dlouhy S.R., Farlow M.R., Caes C., da Costa M.,  
 RA Conneally P.M., Hodges M.E., Ghetti B., Prusiner S.B.;  
 RT "Mutant prion proteins in Gerstmann-Strausler-Scheinker disease with  
 RT neurofibrillary tangles.";  
 RL Nat. Genet. 1:68-71(1992).  
 RN [15]  
 RP VARIANT CJD ILE-180 AND ARG-232.  
 RX MEDLINE-93213314; PubMed-8461023;  
 RA Kitamoto T., Ohta M., Doh-ura K., Hitoshi S., Terao Y., Tateishi J.;  
 RT "Novel missense variants of prion protein in Creutzfeldt-Jakob  
 RT disease or Gerstmann-Strausler syndrome.";  
 RL Biochem. Biophys. Res. Commun. 191:709-714(1993).  
 RN [16]  
 RP VARIANT CJD ILE-210.  
 RX MEDLINE-94071412; PubMed-7902693;  
 RA Pocchiari M., Salvatore M., Cutruzzola F., Gennardi M.,  
 RA Allcatelli C.T., Masullo C., Macchi G., Alema G., Gagliani S., XI Y.G.,  
 RA Petraroli R., Silvestrini M.C., Brunori M.;  
 RT "A new point mutation of the prion protein gene in Creutzfeldt-Jakob  
 RT disease.";  
 RL Ann. Neurol. 34:802-807(1993).  
 RN [17]  
 RP VARIANT GSS LEU-105.  
 RX MEDLINE-94077414; PubMed-7902972;  
 RA Yamada M., Itoh Y., Fujisaki H., Naruse S., Kaneko K., Kitamoto T.,  
 RA Tateishi J., Ohtomo E., Hayakawa M., Tanaka J., Matsushita M.,  
 RA Miyake T.;  
 RT "A missense mutation at codon 105 with codon 129 polymorphism of the  
 RT prion protein gene in a new variant of Gerstmann-Strausler-Scheinker  
 RT disease.";  
 RL Neurology 43:2723-2724(1993).  
 RN [18]  
 RP VARIANT GSS LEU-105.  
 RX MEDLINE-95213742; PubMed-7699395;  
 RA Itoh Y., Yamada M., Hayakawa M., Shozawa T., Tanaka J., Matsushita M.,  
 RA Kitamoto T., Tateishi J., Ohtomo E.;  
 RT "A variant of Gerstmann-Strausler-Scheinker disease carrying codon  
 RT 105 mutation with codon 129 polymorphism of the prion protein gene: a  
 RT clinicopathological study.";  
 RL J. Neurol. Sci. 127:77-86(1994).  
 RN [19]  
 RP VARIANT CJD LYS-200.  
 RX MEDLINE-94142912; PubMed-7906019;  
 RA Inoue I., Kitamoto T., Doh-ura K., Shii H., Goto I., Tateishi J.;  
 RT "Japanese family with Creutzfeldt-Jakob disease with codon 200 point  
 RT mutation of the prion protein gene.";  
 RL Neurology 44:299-301(1994).  
 RN [20]  
 RP VARIANT CJD LYS-200.  
 RX MEDLINE-94316708; PubMed-7913755;  
 RA Gabilson R., Rosenman H., Weiner Z., Kahana I., Kahana E., Shugart Y.,  
 RA Ott J., Prusiner S.B.;  
 RT "Mutation in codon 200 and polymorphism in codon 129 of the prion  
 RT protein gene in Libyan Jews with Creutzfeldt-Jakob disease.";  
 RL Philos. Trans. R. Soc. Lond., B, Biol. Sci. 343:385-390(1994).

RN [21]  
 RP VARIANT GSS LEU-102.  
 RX MEDLINE-95303274; PubMed-7783876;  
 RA Young K., Jones C.K., Piccardo P., Iazzarini A., Golbe L.I.,  
 RA Zimmerman T.R., Dickson D.W., McLachlan D.C., St George-Hyslop P.H.,  
 RA Lennox A.;  
 RT "Gerstmann-Strausler-Scheinker disease with mutation at codon 102  
 RT and methionine at codon 129 of PrP in previously unreported  
 RT patients.";  
 RL Neurology 45:1127-1134(1995).  
 RN [22]  
 Query Match 93.2%; Score 41; DB 1; Length 253;  
 Best Local Similarity 77.8%; Pred. No. 0.2;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1 GADKEDRY 9  
 DB 142 GSDYEDRY 150  
 RESULT 3  
 PRO\_PANTR STANDARD; PRT; 253 AA.  
 ID PRO\_PANTR  
 AC P40253;  
 DT 01-FEB-1995 (Rel. 31, Created)  
 DT 01-FEB-1995 (Rel. 31, Last sequence update)  
 DT 30-MAY-2000 (Rel. 39, Last annotation update)  
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).  
 GN PrP.  
 OS Pan troglodytes (Chimpanzee),  
 OS Hylobates lar (Common gibbon), and  
 OS Hylobates syndactylus (Siamese) (Symphalangus syndactylus).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Pan.  
 OX NCBI\_TaxID:9598, 9580, 9590;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE-95139066; PubMed-7837269;  
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;  
 RT "Prion protein gene variation among primates.";  
 RL J. Mol. Biol. 245:362-374(1995).  
 RN [2]  
 RP SEQUENCE FROM N.A.  
 RX SPECIES-P. troglodytes; TISSUE-Brain;  
 RC MEDLINE-95083661; PubMed-7991600;  
 RA Cervenakova L., Brown P., Goldfarb L.G., Nagle J., Petrone K.,  
 RA Rubenstein R., Dubnick M., Gibbs C.J., Gajdusek D.C.;  
 RT "Infectious amyloid precursor gene sequences in primates used for  
 RT experimental transmission of human spongiform encephalopathy.";  
 RL Proc. Natl. Acad. Sci. U.S.A. 91:12159-12162(1994).  
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
 CC "RODS".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASE KURU,  
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STAUSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
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 CC -----  
 CC EMBL: U08296; AAC50085.1; -;  
 CC DR EMBL: U08299; AAC50088.1; -;

CC EMBL: U08308; AAC50096.1; -  
 DR HSSP: U15039; AAA68632.1; -  
 DR HSSP: P04156; IOLZ.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; prion.1.  
 DR PRINTS: PR00341; PRION.  
 DR SMART: SM00157; PRP.1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 DR Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT SIGNAL 1 22  
 FT CHAIN 23 230  
 FT PROPEP 231 253  
 FT LIPID 230 230  
 FT DISULFID 179 214  
 FT CARBOHYD 181 181  
 FT CARBOHYD 197 197  
 FT DOMAIN 51 91  
 FT REPEAT 51 59  
 FT REPEAT 60 67  
 FT REPEAT 68 75  
 FT REPEAT 76 83  
 FT REPEAT 84 91  
 SQ SEQUENCE 253 AA; 27633 MW; CF8F59F040996B74 CRC64;  
 Query Match 93.2%; Score 41; DB 1; Length 253;  
 Best Local Similarity 77.8%; Pred. No. 0.2;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
 1 | 11111  
 DB 142 GSDYEDRY 150

## RESULT 4

PRP2\_TRAST STANDARD: PRT: 256 AA.  
 ID PRP2\_TRAST  
 AC P40243;  
 DT 01-FEB-1995 (Rel. 31, Created)  
 DT 01-FEB-1995 (Rel. 31, Last sequence update)  
 DT 01-FEB-1995 (Rel. 31, Last annotation update)  
 DE Major prion protein 2 precursor (Prp) (Major scrapie-associated fibril protein 2).  
 OS Trengelaphus streptoceros (Greater kudu).  
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae; Bovidae; Bovinae; Trengelaphus.  
 CC NCBI\_TaxID=9946;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC Tissue=Brain;  
 RA Martin T.C., Hughes S.L., Hughes K.J., Dawson M.;  
 RL Submitted (Aug-1993) to the EMBL/Genbank/DBJ databases.  
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED "RODS".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU, CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.

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CC EMBL: X74759; CAA52775.1; -  
 DR HSSP: P10279; IDWT.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; prion.1.  
 DR PRINTS: PR00341; PRION.  
 DR SMART: SM00157; PRP.1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 DR Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT SIGNAL 1 24  
 FT CHAIN 25 256  
 FT CARBOHYD 184 184  
 FT CARBOHYD 200 200  
 FT DISULFID 182 217  
 FT DOMAIN 54 95  
 FT REPEAT 54 62  
 FT REPEAT 63 70  
 FT REPEAT 71 78  
 FT REPEAT 79 86  
 FT REPEAT 87 95  
 SQ SEQUENCE 256 AA; 28050 MW; D4D02CD8FC918743 CRC64;  
 Query Match 93.2%; Score 41; DB 1; Length 256;  
 Best Local Similarity 77.8%; Pred. No. 0.2;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
 1 | 11111  
 DB 145 GSDYEDRY 153

## RESULT 5

PRIO\_PIG STANDARD: PRT: 257 AA.  
 ID PRIO\_PIG  
 AC P49927;  
 DT 01-OCT-1996 (Rel. 34, Created)  
 DT 01-OCT-1996 (Rel. 34, Last sequence update)  
 DT 01-OCT-1996 (Rel. 34, Last annotation update)  
 DE Major prion protein precursor (Prp).  
 OS Sus scrofa (Pig).  
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.  
 CC NCBI\_TaxID=9823;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC MEDLINE=95244627; PubMed=7727546;  
 RA Martin T., Hughes S., Hughes K., Dawson M.;  
 RL Blochm. Biophys. Acta 1270:211-214(1995).  
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED "RODS".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU, CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.

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EMBL: L07623; AAA92862.1; -



DR HSSP; P10279; 10WY.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; prion.1.  
 DR PRINTS: PR00341; PRION.  
 DR SMART: SM00157; PRP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT SIGNAL 1 24  
 FT CHAIN 25 257  
 FT CARBOHYD 185 185  
 FT CARBOHYD 201 201  
 FT DISULFID 183 218  
 FT DOMAIN 54 95  
 FT REPEAT 54 62  
 FT REPEAT 63 70  
 FT REPEAT 71 78  
 FT REPEAT 79 86  
 FT REPEAT 87 95  
 FT REPEAT 95 5.  
 SQ SEQUENCE 257 AA; 27727 MW; 3A87104B234C55DD CRC64;  
 Query Match 93.2%; Score 41; DB 1; Length 257;  
 Best Local Similarity 77.8%; Pred. No. 0.2; Mismatches 0; Gaps 0;  
 Matches 7; Conservative 0; Indels 0;  
 Oy 1 GAXDEXRY 9  
 Db 146 GSDYEDRY 154  
 ID P10279: STANDARD: PRT: 264 AA.  
 AC P10279:  
 DT 01-MAR-1989 (rel. 10, Created)  
 DT 01-NOV-1991 (rel. 20, Last sequence update)  
 DT 15-JUN-2002 (rel. 41, Last annotation update)  
 DE Major prion protein 1 precursor (PrP) (Major scrapie-associated fibril protein 1).  
 DE PRNP OR PrP.  
 GN PRNP OR PrP.  
 OS Bos taurus (Bovine).  
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
 OC Bovidae; Bovinae; Bos.  
 OX NCBI\_TaxID=9913;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC STRAIN-Holstein-Friesian;  
 RA GOLDMANN W., Hunter N., Martin T., Dawson M., Hope J.;  
 RT "Different forms of the bovine PrP gene have five or six copies of a short, G-C-rich element within the protein-coding exon";  
 RL J. Gen. Virol. 72:201-204(1991).  
 RN [2]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE-Brain;  
 RA MEDLINE-93118243; PubMed-1362024;  
 RA Yoshimura J., Iinuma T., Ishiguro N., Horuchi M., Imanura M.,  
 RA Shimagawa M.;  
 RT "Comparative sequence analysis and expression of bovine PrP gene in mouse L-929 cells";  
 RL Virus Genes 6:343-356(1992).  
 RN [3]  
 RP SEQUENCE FROM N.A.  
 RC MEDLINE-93179783; PubMed-8440932;  
 RA Prusiner S.B., Fuzi M., Scott M., Serban D., Serban H.,  
 RA Taraboulos A., Gabriel J.M., Wells G.A., Wilesmith J.W., Bradley R.;  
 RT "Immunologic and molecular biologic studies of prion proteins in bovine spongiform encephalopathy";  
 RL J. Infect. Dis. 167:602-613(1993).  
 RN [4]  
 RP SEQUENCE FROM N.A.

RC STRAIN-Holstein-Friesian; TISSUE-Brain;  
 RA Horuchi M.;  
 RL Submitted (FEB-1997) to the EMBL/GenBank/DBJ databases.  
 RN [5]  
 RP SEQUENCE FROM N.A.  
 RC STRAIN-Jersey;  
 RA MEDLINE-21422903; PubMed-11531705;  
 RA Hills D., Cominclin S., Schlaepfer J., Dolf G., Ferretti L.,  
 RA Williams J.L.;  
 RT "Complete genomic sequence of the bovine prion gene (PrNP) and polymorphism in its promoter region";  
 RL Anim. Genet. 32:231-232(2001).  
 RN [6]  
 RP SEQUENCE OF 1-15 FROM N.A.  
 RA Tanaka M., Inoue S., Ikeda T., Horuchi M., Ishiguro N., Shimagawa M.;  
 RL Submitted (JAN-1994) to the EMBL/GenBank/DBJ databases.  
 RN [7]  
 RP SEQUENCE OF 25-36.  
 RA MEDLINE-89057122; PubMed-2904126;  
 RA Hope J., Reekie L.J.D., Hunter N., Multhaup G., Beyreuther K.,  
 RA White H., Scott A.C., Stack M.J., Dawson M., Wells G.A.;  
 RT "Fibrils from brains of cows with new cattle disease contain scrapie-associated protein";  
 RL Nature 336:390-392(1988).  
 RN [8]  
 RP STRUCTURE BY NMR OF 132-241.  
 RA MEDLINE-20359707; PubMed-10899999;  
 RA Lopez Garcia F., Zahn R., Riek R., Wuthrich K.;  
 RT "NMR structure of the bovine prion protein";  
 RL Proc. Natl. Acad. Sci. U.S.A. 97:8334-8339(2000).  
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED "RODS".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU, CRETZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
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 CC -----  
 CC EMBL: X55882; CAA39368.1; -  
 CC EMBL: D10612; BAA01467.1; -  
 CC EMBL: D10613; BAA01468.1; -  
 CC EMBL: S55629; AAB25514.1; -  
 CC EMBL: AB001468; BAA19253.1; -  
 CC EMBL: A2298878; CAC37367.1; -  
 CC EMBL: D26151; BAA05138.1; -  
 CC PIR: S07347; S07347.  
 CC PIR: J70953; J70953.  
 CC PIR: A54330; A54330.  
 CC PDB: 1DWZ; 20-JUL-00.  
 CC PDB: 1DX0; 20-JUL-00.  
 CC PDB: 1DX1; 20-JUL-00.  
 CC InterPro: IPR001610; PAC.  
 CC InterPro: IPR000817; Prion.  
 CC Pfam: PF00377; prion.1.  
 CC PRINTS: PR00341; PRION.  
 CC SMART: SM00157; PRP; 1.  
 CC SMART: SM00086; PAC; 1.  
 CC PROSITE: PS00291; PRION\_1; 1.  
 CC PROSITE: PS00706; PRION\_2; 1.  
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal; 3D-structure.

DR SIGNAL 1 24 MAJOR PRION PROTEIN 1.  
 FT CHAIN 25 264 N-LINKED (GLCNAC. . .) (PROBABLE).  
 FT CARBOHYD 192 192 N-LINKED (GLCNAC. . .) (PROBABLE).  
 FT CARBOHYD 208 208 N-LINKED (GLCNAC. . .) (PROBABLE).  
 FT DISULFID 190 225 6 x 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-  
 FT DOMAIN 54 103 0.  
 FT REPEAT 54 62 1.  
 FT REPEAT 63 70 2.  
 FT REPEAT 71 78 3.  
 FT REPEAT 79 86 4.  
 FT REPEAT 87 94 5.  
 FT REPEAT 95 103 6.  
 FT VARIANT 71 78 MISSING (IN A SECOND ALLELE).  
 FT CONFLICT 218 218 E -> K (IN REF. 2 AND 4).  
 SQ SEQUENCE 264 AA; 28614 MW; D6D21A038316A231 CRC64;

Query Match 93.2%; Score 41; DB 1; Length 264;  
 Best Local Similarity 77.8%; Pred. No. 0.21;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9  
 Db 153 GSDYEDRY 161

RESULT 7  
 PRP1\_TRAST STANDARD; PRT: 264 AA.  
 ID PRP1\_TRAST STANDARD; PRT: 264 AA.  
 AC P40242;  
 DT 01-FEB-1995 (Rel. 31, Created)  
 DT 01-FEB-1995 (Rel. 31, Last sequence update)  
 DT 01-NOV-1997 (Rel. 35, Last annotation update)  
 DE Major prion protein 1 precursor (Prp) (Major scrapie-associated fibril protein 1).  
 OS Tragedelphus strepsiceros (Greater kudu).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae; Bovidae; Bovinae; Tragelaphus.  
 NC NCBI\_TaxID=9946;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=Brain;  
 RA Martin J.C., Hughes S.L., Hughes K.J., Dawson M.;  
 RL Submitted (Aug-1993) to the EMBL/GenBank/DBJ databases.  
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED "RODS".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU, CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
 CC -----  
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 CC -----  
 CC EMBL; X74771; CAA52781.1; -;  
 DR PIR; S37137; S37137.  
 DR HSSP; P10279; IDWY.  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; Prion; 1.  
 DR PRINTS; PR00341; PRION.  
 DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.

DR PROSITE; PS00706; PRION\_2; 1.  
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT SIGNAL 1 24 POTENTIAL.  
 FT CHAIN 25 264 MAJOR PRION PROTEIN 1.  
 FT CARBOHYD 192 192 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT CARBOHYD 208 208 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT DISULFID 190 225 BY SIMILARITY.  
 FT DOMAIN 54 103 6 x 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-  
 FT REPEAT 54 62 0.  
 FT REPEAT 63 70 1.  
 FT REPEAT 71 78 2.  
 FT REPEAT 79 86 3.  
 FT REPEAT 87 94 4.  
 FT REPEAT 95 103 5.  
 SQ SEQUENCE 264 AA; 28644 MW; FEB73F41732619B1 CRC64;

Query Match 93.2%; Score 41; DB 1; Length 264;  
 Best Local Similarity 77.8%; Pred. No. 0.21;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9  
 Db 153 GSDYEDRY 161

RESULT 8  
 PRIO\_ATEGE STANDARD; PRT: 232 AA.  
 ID PRIO\_ATEGE STANDARD; PRT: 232 AA.  
 AC P40246;  
 DT 01-FEB-1995 (Rel. 31, Created)  
 DT 01-FEB-1995 (Rel. 31, Last sequence update)  
 DT 01-NOV-1996 (Rel. 34, Last annotation update)  
 DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35c) (Fragment).  
 GN PRNP.  
 OS Ateles geoffroyi (Black-handed spider monkey).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateleinae; Ateles.  
 NC NCBI\_TaxID=9509;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=95139066; Pubmed=7837269;  
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;  
 RT "Prion protein gene variation among primates.";  
 RL J. Mol. Biol. 245:362-374(1995).  
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED "RODS".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU, CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
 CC -----  
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 CC -----  
 CC EMBL; U08309; AAC50097.1; -;  
 DR HSSP; P04156; IEIG.  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; Prion; 1.  
 DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.

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FT  NON_TER 1 1
FT  SIGNAL <1 15
FT  CHAIN 16 214
FT  PROPEP 215 >232
FT  LIPID 214 198
FT  DISULFID 163 198
FT  CARBOHYD 165 165
FT  CARBOHYD 161 161
FT  DOMAIN 44 84
FT  REPEAT 44 51
FT  REPEAT 52 59
FT  REPEAT 60 67
FT  REPEAT 68 75
FT  NON_TER 232 232
SQ  SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05C4A CRC64;

Query Match
Best Local Similarity 90.9%; Score 40; DB 1; Length 232;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
DB 126 GNDYEDRY 134

RESULT 9
PRIO_CERAT STANDARD; PRT; 238 AA.
AC 095145: 095200:
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN PRNP.
OS Cercopithecus aethiops, and
OS Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Craniala; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_Taxid=36222, 9546;
RN [1]
RP SEQUENCE FROM N.A.
RA der Kuyt A.C., Dekker J.T., Goudsmit J.;
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
CC "RODS".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: U75384; AAB50623.1; -
DR EMBL: U75387; AAB50629.1; -
DR HSSP: P04925; IAG2.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR SMART: SM00157; PrP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR NON_TER 1

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KM  Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
FT  NON_TER 1 1
FT  SIGNAL <1 15
FT  CHAIN 16 215
FT  PROPEP 216 238
FT  LIPID 215 215
FT  DISULFID 164 199
FT  CARBOHYD 166 166
FT  CARBOHYD 162 162
FT  DOMAIN 44 76
FT  REPEAT 44 52
FT  REPEAT 53 60
FT  REPEAT 61 68
FT  REPEAT 69 76
FT  NON_TER 238 AA; 26123 MW; 5F59A3EBC3E3531B CRC64;

Query Match
Best Local Similarity 90.9%; Score 40; DB 1; Length 238;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
DB 127 GNDYEDRY 135

RESULT 10
PRIO_THEGE STANDARD; PRT; 238 AA.
AC 095270:
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 01-NOV-1997 (Rel. 35, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN PRNP OR PRP.
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniala; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecoidea; Theropithecus.
OX NCBI_Taxid=9565;
RN [1]
RP SEQUENCE FROM N.A.
RA der Kuyt A.C., Dekker J.T., Goudsmit J.;
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
CC "RODS".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
CC -----
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CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: U75383; AAB50630.1; -
DR HSSP: P04925; IAG2.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR SMART: SM00157; PrP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
FT  NON_TER 1

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FT SIGNAL <1 15 BY SIMILARITY.  
 FT CHAIN 16 >238 MAJOR PRION PROTEIN.  
 FT DISULFID 164 199 BY SIMILARITY.  
 FT CARBOHYD 166 199 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT CARBOHYD 182 182 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT DOMAIN 44 83 4 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-  
 FT REPEAT 44 52 0.  
 FT REPEAT 53 60 1.  
 FT REPEAT 61 68 2.  
 FT REPEAT 69 76 3.  
 FT NON\_TER 238 238 4.  
 SQ SEQUENCE 238 AA; 26104 MM; 5F59BFE602243EDB CRC64;  
 Query Match 90.9%; Score 40; DB 1; Length 238;  
 Best Local Similarity 77.8%; Pred. No. 0.3;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 OY 1 GNDXEDRY 9  
 DB 127 GNDYEDRY 135

RESULT 11  
 -PRIO\_AOTTR STANDARD; PRT; 239 AA.  
 ID P40245;  
 AC P40245;  
 DT 01-FEB-1995 (Rel. 31, Created)  
 DT 01-FEB-1995 (Rel. 31, Last sequence update)  
 DT 01-FEB-1995 (Rel. 32, Last annotation update)  
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).  
 GN PRNP.  
 OS Aotus trivirgatus (Night monkey) (Douroucoulli).  
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Aotinae; Aotus.  
 OX NCBI\_TaxID=9505;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=95139066; PubMed=7837269;  
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;  
 RT "Prion protein gene variation among primates.";  
 RL J. Mol. Biol. 245:362-374(1995).  
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
 CC "RODS".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CC CRUZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
 CC  
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 CC  
 CC EMBL; U08393; AAC50082.1; -  
 DR HSSP; P04925; IAG2.  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; prion.1.  
 DR SMART; SM00157; Prp.1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT NON\_TER 1 1  
 FT SIGNAL <1 15 BY SIMILARITY.  
 FT CHAIN 16 >239 MAJOR PRION PROTEIN.

FT DISULFID 171 206 BY SIMILARITY.  
 FT CARBOHYD 173 173 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT CARBOHYD 189 189 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT DOMAIN 44 83 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-  
 FT REPEAT 44 51 0.  
 FT REPEAT 52 59 1.  
 FT REPEAT 60 67 2.  
 FT REPEAT 68 75 3.  
 FT REPEAT 76 83 4.  
 FT NON\_TER 239 239 5.  
 SQ SEQUENCE 239 AA; 26246 MM; 2EEB77E354B7024A CRC64;  
 Query Match 90.9%; Score 40; DB 1; Length 239;  
 Best Local Similarity 77.8%; Pred. No. 0.3;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 OY 1 GNDXEDRY 9  
 DB 134 GNDYEDRY 142

RESULT 12  
 -PRIO\_CALMO STANDARD; PRT; 241 AA.  
 ID P40248;  
 AC P40248;  
 DT 01-FEB-1995 (Rel. 31, Created)  
 DT 01-FEB-1995 (Rel. 31, Last sequence update)  
 DT 01-FEB-1995 (Rel. 32, Last annotation update)  
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).  
 GN PRNP.  
 OS Calliobus moloch (Dusky titl).  
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Calliobinae;  
 OC Calliobus.  
 OX NCBI\_TaxID=9523;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=95139066; PubMed=7837269;  
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;  
 RT "Prion protein gene variation among primates.";  
 RL J. Mol. Biol. 245:362-374(1995).  
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
 CC "RODS".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CC CRUZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
 CC  
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 CC  
 CC EMBL; U08312; AAC50100.1; -  
 DR HSSP; P04925; IAG2.  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; prion.1.  
 DR SMART; SM00157; Prp.1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT NON\_TER 1 1  
 FT SIGNAL <1 15 BY SIMILARITY.  
 FT CHAIN 16 >241 MAJOR PRION PROTEIN.

FT DISULFID 172 207 BY SIMILARITY.  
 FT CARBOHYD 174 174 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT CARBOHYD 190 190 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT DOMAIN 44 84 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-  
 FT REPEAT 44 52 0.  
 FT REPEAT 53 60 1.  
 FT REPEAT 61 68 2.  
 FT REPEAT 69 76 3.  
 FT REPEAT 77 84 4.  
 FT NON\_TER 241 241 5.  
 SQ SEQUENCE 241 AA; 26373 MW; C6D2013BE7CAEC93 CRC64;

Query Match  
 Best Local Similarity 90.9%; Score 40; DB 1; Length 241;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GNDXEDRY 9  
 DB 135 GNDYEDRY 143

RESULT 13  
 ID PRIO\_MANSP STANDARD; PRT; 241 AA.  
 AC P40255;  
 DT 01-FEB-1995 (Rel. 31, Created)  
 DT 01-FEB-1995 (Rel. 31, Last sequence update)  
 DT 01-OCT-1996 (Rel. 34, Last annotation update)  
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).  
 GN PRNP.  
 OS Mandrilus sphinx (Mandrill) (Papio sphinx).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
 OC Cercopithecinae; Mandrilus.  
 OX NCBI\_Taxid=9561;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=95139066; PubMed=7837269;  
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;  
 RL J. Mol. Biol. 245:362-374(1995).  
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
 CC "RODS".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
 CC -----  
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 CC -----  
 CC EMBL: U08303; AAC50091.1; -  
 CC HSSP: P04925; IAG2.  
 CC InterPro: IPR000817; Prion.  
 CC Pfam: PF00377; prion.1.  
 CC SMART: PS00291; prion.1;  
 CC PROSITE: PS00706; PRION\_1; 1.  
 CC Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT NON\_TER 1 1  
 FT SIGNAL <1 15 BY SIMILARITY.  
 FT CHAIN 16 223 MAJOR PRION PROTEIN.

FT PROPEP 224 >241 REMOVED IN MATURE FORM (BY SIMILARITY).  
 FT LIPID 223 223 GPI-ANCHOR (BY SIMILARITY).  
 FT DISULFID 172 223 BY SIMILARITY.  
 FT CARBOHYD 174 174 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT CARBOHYD 190 190 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT DOMAIN 44 84 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-  
 FT REPEAT 44 52 0.  
 FT REPEAT 53 60 1.  
 FT REPEAT 61 68 2.  
 FT REPEAT 69 76 3.  
 FT REPEAT 77 84 4.  
 FT NON\_TER 241 241 5.  
 SQ SEQUENCE 241 AA; 26398 MW; E539D84E2E2B59DE CRC64;

Query Match  
 Best Local Similarity 90.9%; Score 40; DB 1; Length 241;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GNDXEDRY 9  
 DB 135 GNDYEDRY 143

RESULT 14  
 ID PRIO\_CERAE STANDARD; PRT; 245 AA.  
 AC P40250;  
 DT 01-FEB-1995 (Rel. 31, Created)  
 DT 01-FEB-1995 (Rel. 31, Last sequence update)  
 DT 16-OCT-2001 (Rel. 40, Last annotation update)  
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).  
 GN PRNP.  
 OS Cercopithecus aethiops (Green monkey) (Grivet), and  
 OS Cercopithecus diana (Diana monkey).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
 OC Cercopithecinae; Cercopithecus.  
 OX NCBI\_Taxid=9534, 36224;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=95139066; PubMed=7837269;  
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;  
 RL J. Mol. Biol. 245:362-374(1995).  
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
 CC "RODS".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
 CC -----  
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 CC -----  
 CC EMBL: U08291; AAC50080.1; -  
 CC HSSP: P04925; IAG2.  
 CC InterPro: IPR000817; Prion.  
 CC Pfam: PF00377; prion.1.  
 CC PRINTS: PR00341; PRION.  
 CC SMART: SM00157; prp.1.  
 CC PROSITE: PS00291; PRION\_1; 1.

DR PROSITE: P500706; PRION\_2; 1.  
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT SIGNAL 1 22  
 FT CHAIN 23 222  
 FT PROPEP 223 222  
 FT LIPID 222 222  
 FT DISULFID 171 206  
 FT CARBOHYD 173 173  
 FT CARBOHYD 189 189  
 FT DOMAIN 51 83  
 FT REPEAT 51 59  
 FT REPEAT 60 67  
 FT REPEAT 68 75  
 FT REPEAT 76 83  
 SQ SEQUENCE 245 AA; 26885 MW; D582B5BE2726C99A CRC64;  
 Query Match 90.9%; Score 40; DB 1; Length 245;  
 Best Local Similarity 77.8%; Pred. No. 0.31;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1 GDXEDRY 9  
 DB 134 GNDYEDRY 142

RESULT 15  
 ID PRIO\_CERMO STANDARD; PRT; 246 AA.  
 -AC 095172; 095173;  
 DT 01-NOV-1997 (Rel. 35, Created)  
 DT 01-NOV-1997 (Rel. 35, Last sequence update)  
 DT 15-JUL-1998 (Rel. 36, Last annotation update)  
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).  
 GN PRNP.  
 OS Cercopithecus mona, and  
 OS Cercopithecus neglectus.  
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
 OC Cercopithecinae; Cercopithecus.  
 OX NCBI\_TaxID=36226, 36227;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RA der Kuyt A.C., Dekker J.T., Goudsmit J.;  
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.  
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
 CC "RODS".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
 CC -----  
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 CC -----  
 CC EMBL: U75386; AAB50625.1; -  
 CC EMBL: U75387; AAB50626.1; -  
 CC HSSP: P04925; IAG2.  
 CC InterPro: IPR000817; Prion.  
 CC Pfam: PF00377; prion.1.  
 CC SMART: SM00157; PRP.1.  
 CC PROSITE: P500291; PRION\_1; 1.  
 CC PROSITE: P500706; PRION\_2; 1.

KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT NON\_TER 1 1  
 FT SIGNAL 1 15  
 FT CHAIN 16 223  
 FT PROPEP 224 226  
 FT LIPID 223 223  
 FT DISULFID 172 207  
 FT CARBOHYD 174 174  
 FT CARBOHYD 190 190  
 FT DOMAIN 44 84  
 FT REPEAT 44 52  
 FT REPEAT 53 60  
 FT REPEAT 61 68  
 FT REPEAT 69 76  
 FT REPEAT 77 84  
 SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;  
 Query Match 90.9%; Score 40; DB 1; Length 246;  
 Best Local Similarity 77.8%; Pred. No. 0.31;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1 GDXEDRY 9  
 DB 135 GNDYEDRY 143

Search completed: March 24, 2003, 17:20:17  
 Job time : 6.4375 secs

GenCore version 5.1.4\_p5\_4578  
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OM protein - protein search, using sw model

Run on: March 24, 2003, 17:19:46 ; Search time 19.6875 Seconds  
(without alignments)  
94.193 Million cell updates/sec

Title:	US-09-508-828B-1
perfect score:	44
Sequence:	1 GDXEDRY 9

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

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Searched:      671580 seqs, 206047115 residues
Total number of hits satisfying chosen parameters: 671580

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Minimum DB seq length: 0
Maximum DB seq length: 20000000000
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Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

```
Database :
1:  sp_archaea:*
2:  sp_bacteria:*
3:  sp_fungi:*
4:  sp_human:*
5:  sp_invertebrate:*
6:  sp_mammal:*
7:  sp_mhc:*
8:  sp_organelle:*
9:  sp_phage:*
10: sp_plant:*
11: sp_protist:*
12: sp_virus:*
13: sp_vertebrate:*
14: sp_unclassified:*
15: sp_virus:*
16: sp_bacteriaph:*
17: sp_archaeap:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	41	99.2	181	6	097905	097905 tursiops tr
2	41	99.2	141	6	097911	097911 budorcas ta
3	41	99.2	200	6	097912	097912 bison donas
4	41	99.2	215	6	097904	097904 bos javanic
5	41	99.2	233	4	P78446	P78446 homo sapien
6	41	99.2	243	4	015216	015216 homo sapien
7	41	99.2	246	4	060489	060489 homo sapien
8	41	99.2	253	4	090P19	090P19 homo sapien
9	41	99.2	253	4	096E70	096E70 homo sapien
10	41	99.2	253	4	098B60	098B60 homo sapien
11	41	99.2	256	6	095M08	095M08 budorcas ta
12	41	99.2	285	4	075942	075942 homo sapien
13	40	90.9	124	6	09TU20	09TU20 varecia van
14	40	90.9	185	6	097694	097694 cervus nippi
15	40	90.9	185	6	097903	097903 addax nasom
16	40	90.9	195	6	097693	097693 canis lupus

17	40	90.9	202	6	097908	097908 capra nubia
18	40	90.9	202	6	097696	097696 lama glama
19	40	90.9	204	6	097629	097629 odocollens
20	40	90.9	204	6	097818	097818 odocollens
21	40	90.9	204	6	097817	097817 odocollens
22	40	90.9	209	6	097902	097902 camelus dro
23	40	90.9	211	6	077787	077787 antilocapra
24	40	90.9	212	6	097698	097698 cervus elap
25	40	90.9	213	6	097903	097904 canis famill
26	40	90.9	214	6	097903	097903 canis famill
27	40	90.9	216	6	097905	097900 bos taurus
28	40	90.9	220	6	002825	002825 odocollens
29	40	90.9	222	6	097913	097913 equus quagga
30	40	90.9	223	6	097910	097910 hippotragus
31	40	90.9	226	6	097907	097907 gazella sub
32	40	90.9	227	6	097964	097964 equus cabala
33	40	90.9	227	6	097964	097964 equus cabala
34	40	90.9	245	6	097695	097695 giraffa cam
35	40	90.9	245	6	097695	097695 odocollens
36	40	90.9	256	6	097858	097818 oryxotragus
37	40	90.9	256	6	097858	097901 capra hircu
38	40	90.9	256	6	097907	097907 ovis aries
39	40	90.9	256	6	097905	097905 ovis aries
40	40	90.9	256	6	097908	097908 odocollens
41	40	90.9	256	6	095812	095812 ovis aries
42	40	90.9	256	6	002841	002841 odocollens
43	40	90.9	256	6	062670	062670 cervus elap
44	40	90.9	256	6	046648	046648 capra hircu
45	40	90.9	256	6	085977	085977 capra hircu

## ALIGNMENTS

## RESULT 1

ID	097905		PRT;	141 AA.
AC	097905			
DT	01-MAY-1999	(TREMBLrel, 10, Created)		
DR	01-MAY-1999	(TREMBLrel, 10, Last sequence update)		
DN	01-JUN-2002	(TREMBLrel, 21, Last annotation update)		
DE	Prion protein (Fragment).			
GN	PRP.			
OS	Tursiops truncatus (Atlantic bottle-nosed dolphin).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
CC	Mammalia; Eutheria; Cetartiodactyla; Cetacea; Odontoceti; Delphinidae;			
OX	Tursiops.			
RN	NCBI_TaxId=9739;			
RP	(1)			
RC	SEQUENCE FROM N.A.			
RA	MEDLINE=99303687; PubMed=10373359;			
RT	Wopfinger F., Weldenhofer G., Schneider R., von Brunn A., Gilch S.,			
RL	Schwarz T.F., Werner T., Schatzl H.M.;			
J. Mol. Biol.	289:1163-1178(1999).			
EMBL:	AFL17311; AACD1982.1; ..			
HSSP:	P10279; IDWY.			
InterPro:	IPR000817; Prion.			
Pfam:	PF00377; prion.1.			
PRINTS:	PR00341; PRION.			
SMART:	SMO0157; PRP.1.			
PROSITE:	PS00291; PRION_1; 1.			
NON_TER	1			
FT	NON_TER			
SEQUENCE	141 AA; 15066 MM; 79BE306E2AA187C CRC64;			
Query March		93.2%; Score 41; DB 6; Length 141;		
Best Local Similarity		77.8%; Pred. No. 0.65;		
Matches	7; Conservative	0; Mismatches	2; Indels	0; Gaps
Oy	1 GXDXEDRRY 9			

DB 98 GSDYEDRY 106

## RESULT 2

097911 PRELIMINARY: PRT: 181 AA.  
AC 097911;  
DT 01-MAY-1999 (TRENBLREL. 10, Created)  
DT 01-MAY-1999 (TRENBLREL. 10, Last sequence update)  
DT 01-JUN-2002 (TRENBLREL. 21, Last annotation update)  
DE Pilon protein (Fragment).  
GN PRP.  
OS Budorcas taxicolor (taklin).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
OC Bovidae; Caprinae; Budorcas.  
OX NCBI\_TaxID=31181;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC TISSUE=PBL;  
RX MEDLINE=99303687; PubMed=10373359;  
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
RA Schwarz T.F., Werner T., Schatzl H.M.;  
RT Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
of flexible regions of the prion protein."  
RL J. Mol. Biol. 289:1163-1178(1999).  
DR EMBL: AF117326; AAD19997.1; --  
DR HSSP: P10279; IDMY.  
DR InterPro: IPR002395; Kininogen.  
DR InterPro: IPR00817; Pilon.  
DR Pfam: PF00377; Pilon; 1.  
DR PRINTS: PR00334; KININOGEN.  
DR PRINTS: PR00341; PRION.  
DR SMART: SM00157; PRP; 1.  
DR PROSITE: PS00291; PRION\_1; 1.  
DR NON\_TER 1 1  
FT NON\_TER 181 181  
SQ SEQUENCE 181 AA; 19253 MW; A9001D086442E92A CRC64;

## Query Match

Best Local Similarity 93.2%; Score 41; DB 6; Length 181;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GSDYEDRY 9  
DB 118 GSDYEDRY 126

## RESULT 3

097912 PRELIMINARY: PRT: 200 AA.  
AC 097912;  
DT 01-MAY-1999 (TRENBLREL. 10, Created)  
DT 01-MAY-1999 (TRENBLREL. 10, Last sequence update)  
DT 01-JUN-2002 (TRENBLREL. 21, Last annotation update)  
DE Pilon protein (Fragment).  
GN PRP.  
OS Bison bonasus (European bison).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
OC Bovidae; Bovinae; Bison.  
OX NCBI\_TaxID=9902;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC TISSUE=PBL;  
RX MEDLINE=99303687; PubMed=10373359;  
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
RA Schwarz T.F., Werner T., Schatzl H.M.;  
RT Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
of flexible regions of the prion protein."  
RL J. Mol. Biol. 289:1163-1178(1999).  
DR EMBL: AF117328; AAD19999.1; --

DR HSSP: P10279; IDMY.  
DR InterPro: IPR002395; Kininogen.  
DR InterPro: IPR001610; PAC.  
DR InterPro: IPR000817; Pilon.  
DR Pfam: PF00377; Pilon; 1.  
DR PRINTS: PR00334; KININOGEN.  
DR PRINTS: PR00341; PRION.  
DR SMART: SM00086; PAC; 1.  
DR SMART: SM00157; PRP; 1.  
DR PROSITE: PS00291; PRION\_1; 1.  
DR PROSITE: PS00706; PRION\_2; 1.  
DR NON\_TER 1 1  
FT NON\_TER 200 200  
SQ SEQUENCE 200 AA; 21674 MW; 1F270CDF4BE5271B CRC64;

## Query Match

Best Local Similarity 93.2%; Score 41; DB 6; Length 200;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GSDYEDRY 9  
DB 110 GSDYEDRY 118

## RESULT 4

097904 PRELIMINARY: PRT: 215 AA.  
AC 097904;  
DT 01-MAY-1999 (TRENBLREL. 10, Created)  
DT 01-MAY-1999 (TRENBLREL. 10, Last sequence update)  
DT 01-JUN-2002 (TRENBLREL. 21, Last annotation update)  
DE Pilon protein (Fragment).  
GN PRP.  
OS Bos javanicus (Wild banteng).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
OC Bovidae; Bovinae; Bos.  
OX NCBI\_TaxID=9906;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC TISSUE=PBL;  
RX MEDLINE=99303687; PubMed=10373359;  
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
RA Schwarz T.F., Werner T., Schatzl H.M.;  
RT Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
of flexible regions of the prion protein."  
RL J. Mol. Biol. 289:1163-1178(1999).  
DR EMBL: AF117310; AAD19981.1; --  
DR HSSP: P10279; IDMY.  
DR InterPro: IPR002395; Kininogen.  
DR InterPro: IPR001610; PAC.  
DR InterPro: IPR000817; Pilon.  
DR Pfam: PF00377; Pilon; 1.  
DR PRINTS: PR00334; KININOGEN.  
DR PRINTS: PR00341; PRION.  
DR SMART: SM00086; PAC; 1.  
DR SMART: SM00157; PRP; 1.  
DR PROSITE: PS00291; PRION\_1; 1.  
DR PROSITE: PS00706; PRION\_2; 1.  
DR NON\_TER 1 1  
FT NON\_TER 215 215  
SQ SEQUENCE 215 AA; 23182 MW; 97A36721B1E73AE6 CRC64;

## Query Match

Best Local Similarity 93.2%; Score 41; DB 6; Length 215;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GSDYEDRY 9  
DB 118 GSDYEDRY 126

## RESULT 5



P78446  
ID P78446 PRELIMINARY; PRT; 233 AA.  
AC P78446;  
DT 01-MAY-1997 (TREMBlrel. 03, Created)  
DT 01-MAY-1997 (TREMBlrel. 03, Last sequence update)  
DE 01-JUN-2002 (TREMBlrel. 21, Last annotation update)  
DE Prion protein (Fragment).  
GN PRNP.  
OS Homo sapiens (Human).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.  
OX NCBI\_TaxID=9606;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC TISSUE-BRAIN;  
RX MEDLINE=93250789; PubMed=1363802;  
RA Diederich J.F., Knopman D.S., List J.F., Olson K., Frey W.H.,  
RT Emory C.R., Sung J.H., Haase A.T.;  
RT "Deletion in the prion protein gene in a demented patient.";  
RL Hum. Mol. Genet. 1:443-444(1992).  
RN [2]  
RP SEQUENCE OF 77-84 FROM N.A.  
RX MEDLINE=92073400; PubMed=1683708;  
RA Goldfarb L.G., Brown P., McCombie W.R., Goldhaber D., Swergold G.D.,  
RT Wills P.R., Cervenkova L., Baron H., Gibbs G.J., Gajdusek D.C.;  
RT "Transmissible familial Creutzfeldt-Jakob disease associated with  
RT five, seven, and eight extra octapeptide coding repeats in the PRNP  
RT gene.";  
RL Proc. Natl. Acad. Sci. U.S.A. 88:10926-10930(1991).  
DR EMBL; S71208; AAB20521.1; -  
DR EMBL; M81930; AAB59442.1; -  
DR EMBL; S71212; AAB20523.1; -  
DR EMBL; S71210; AAB20522.1; -  
DR HSSP; P04156; 10LZ.  
DR InterPro: IPR000817; Prion.  
DR Pfam: PF00377; Prion.1.  
DR PRINTS; PR00341; PRION.  
DR SMART; SM00157; PRP.1.  
DR PROSITE; PS00291; PRION\_1; 1.  
DR PROSITE; PS00706; PRION\_2; 1.  
KW Prion.  
FT VARIANT 141 141 R -> C.  
FT NON\_TER 233 233  
SQ SEQUENCE 233 AA; 25442 MW; 6891BD75B319C886 CRC64;  
Query Match 93.2%; Score 41; DB 4; Length 233;  
Best Local Similarity 77.8%; Pred. No. 1.1;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1 GDXEDRY 9  
Db 135 GSDYEDRY 143  
RESULT 6  
Q15216 PRELIMINARY; PRT; 245 AA.  
ID Q15216;  
AC Q15216; 015221;  
DT 01-NOV-1996 (TREMBlrel. 01, Created)  
DT 01-NOV-1996 (TREMBlrel. 01, Last sequence update)  
DT 01-JUN-2002 (TREMBlrel. 21, Last annotation update)  
DE Prion protein.  
GN PRP OR PRNP.  
OS Homo sapiens (Human).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.  
OX NCBI\_TaxID=9606;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC TISSUE-BRAIN;  
RX MEDLINE=91328137; PubMed=1678248;  
RA Puckett C., Concannon P., Casey C., Hood L.;  
RT "Genomic structure of the human prion protein gene.";

RL Am. J. Hum. Genet. 49:320-329(1991).  
RN [2]  
RP SEQUENCE FROM N.A.  
RA Lee I.Y., Westaway D., Smit A.F., Wang K., Cooper C., Yao H.,  
RA Prusiner S.B., Hood L.;  
RL Submitted (FEB-1998) to the EMBL/Genbank/DBJ databases.  
RN [3]  
RP SEQUENCE OF 9-232 FROM N.A.  
RC TISSUE-BRAIN;  
RX MEDLINE=93250789; PubMed=1363802;  
RA Diederich J.F., Knopman D.S., List J.F., Olson K., Frey W.H.,  
RT Emory C.R., Sung J.H., Haase A.T.;  
RT "Deletion in the prion protein gene in a demented patient.";  
RL Hum. Mol. Genet. 1:443-444(1992).  
RN [4]  
RP SEQUENCE OF 41-85 FROM N.A.  
RX MEDLINE=96090306; PubMed=7485229;  
RA Perry R.T., Go R.C., Hartell L.E., Acton R.T.;  
RT "SSCP analysis and sequencing of the human prion protein gene (PRNP)  
RT detects two different 24 bp deletions in an atypical Alzheimer's  
RT disease family.";  
RL Am. J. Med. Genet. 60:12-18(1995).  
DR EMBL; X83416; CA58442.1; -  
DR EMBL; U29185; AAC78725.1; -  
DR EMBL; M81929; AAB59442.1; -  
DR EMBL; S80743; AAB50649.2; -  
DR HSSP; S80732; AAB50648.2; -  
DR InterPro: IPR000817; Prion.  
DR Pfam; PF00377; Prion.1.  
DR PRINTS; PR00341; PRION.  
DR SMART; SM00157; PRP.1.  
DR PROSITE; PS00291; PRION\_1; 1.  
DR PROSITE; PS00706; PRION\_2; 1.  
KW Prion.  
SQ SEQUENCE 245 AA; 26884 MW; 6BF26E0FA3F061AD CRC64;  
Query Match 93.2%; Score 41; DB 4; Length 245;  
Best Local Similarity 77.8%; Pred. No. 1.2;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1 GDXEDRY 9  
Db 134 GSDYEDRY 142  
RESULT 7  
Q06489 PRELIMINARY; PRT; 246 AA.  
ID Q06489;  
AC Q06489;  
DT 01-AUG-1998 (TREMBlrel. 07, Created)  
DT 01-AUG-1998 (TREMBlrel. 07, Last sequence update)  
DT 01-JUN-2002 (TREMBlrel. 21, Last annotation update)  
DE Prion protein variant (Fragment).  
GN PRNP.  
OS Homo sapiens (Human).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.  
OX NCBI\_TaxID=9606;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=98044028; PubMed=9384372;  
RA Samala H.B., Mari J.J., Vallada H.P., Moura R.P., Simpson A.J.,  
RA Brentani R.R.;  
RT "A prion-linked psychiatric disorder.";  
RL Nature 390:241-241(1997).  
DR EMBL; AF030575; AAC05365.1; -  
DR HSSP; P04156; 10LZ.  
DR InterPro: IPR000817; Prion.  
DR Pfam; PF00377; Prion.1.  
DR PRINTS; PR00341; PRION.  
DR SMART; SM00157; PRP.1.  
DR PROSITE; PS00291; PRION\_1; 1.

DR PROSITE: PS00706; PRION\_2; 1.  
 FT NON\_TER 1  
 SQ SEQUENCE 246 AA; 26826 MW; 1D9B122EA7D1C18C CRC64;  
 Query Match 93.2%; Score 41; DB 4; Length 246;  
 Best Local Similarity 77.8%; Pred. No. 1.2;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
 Db 135 GSDYEDRY 143

RESULT 8  
 Q9UP19 PRELIMINARY; PRT; 253 AA.  
 AC Q9UP19;  
 DT 01-MAY-2000 (TREMBLrel. 13, Created)  
 DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)  
 DE P10N protein.  
 GN PRNP.  
 OS Homo sapiens (Human).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.  
 NC NCB1\_TaxID=9606;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE-BLOOD;  
 RX MEDLINE-20049886; PubMed-10581485;  
 RA Cervenakova L., Buecelfsch C., Lee H.S., Tallier I., Stone G.,  
 RA Glibbs C.J. Jr., Brown P., Hallett M., Goldfarb L.G.;  
 RT "Novel PRNP sequence variant associated with familial  
 RT enccephalopathy.";  
 RL Am. J. Med. Genet. 88:653-656(1999).  
 DR EMBL: AF076976; AADA6098.1; -.  
 DR HSSP: P04156; 10LZ.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion; 1.  
 DR PRINTS: PR00341; PRION.  
 DR SMART: SM00157; PRP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 FT VARIANT 187 187 R -> H.  
 SQ SEQUENCE 253 AA; 27648 MW; 43DB58CE45E38A64 CRC64;

Query Match 93.2%; Score 41; DB 4; Length 253;  
 Best Local Similarity 77.8%; Pred. No. 1.2;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
 Db 142 GSDYEDRY 150

RESULT 9  
 Q96E70 PRELIMINARY; PRT; 253 AA.  
 AC Q96E70;  
 DT 01-DEC-2001 (TREMBLrel. 19, Created)  
 DT 01-DEC-2001 (TREMBLrel. 19, Last sequence update)  
 DT 01-MAR-2002 (TREMBLrel. 20, Last annotation update)  
 DE Similar to prion protein (p27-30) (Creutzfeldt-Jakob disease,  
 DE Gerstmann-Strausler-Scheinker syndrome, fatal familial insomnia).  
 OS Homo sapiens (Human).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.  
 NC NCB1\_TaxID=9606;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE-OVARY;  
 RA Strausberg R.;  
 RL Submitted (Aug-2001) to the EMBL/GenBank/DBJ databases.

DR EMBL: BC012844; AAH12844.1; -.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion; 1.  
 DR PROSITE: PS00291; PRION\_1; UNKNOWN\_1.  
 DR PROSITE: PS00706; PRION\_2; UNKNOWN\_1.  
 KW Prion.  
 SQ SEQUENCE 253 AA; 27629 MW; 43DB4D3BA5F67F84 CRC64;

Query Match 93.2%; Score 41; DB 4; Length 253;  
 Best Local Similarity 77.8%; Pred. No. 1.2;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
 Db 142 GSDYEDRY 150

RESULT 10  
 Q8TBG0 PRELIMINARY; PRT; 253 AA.  
 AC Q8TBG0;  
 DT 01-JUN-2002 (TREMBLrel. 21, Created)  
 DT 01-JUN-2002 (TREMBLrel. 21, Last sequence update)  
 DE Hypothetical 27.6 kDa protein.  
 OS Homo sapiens (Human).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.  
 NC NCB1\_TaxID=9606;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE-BRAIN;  
 RA Strausberg R.;  
 RL Submitted (FEB-2002) to the EMBL/GenBank/DBJ databases.  
 DR EMBL: BC022532; AAH22532.1; -.  
 KW Hypothetical protein.  
 SQ SEQUENCE 253 AA; 27629 MW; 43DB569A1FE67F84 CRC64;

Query Match 93.2%; Score 41; DB 4; Length 253;  
 Best Local Similarity 77.8%; Pred. No. 1.2;  
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
 Db 142 GSDYEDRY 150

RESULT 11  
 Q95M08 PRELIMINARY; PRT; 256 AA.  
 AC Q95M08;  
 DT 01-DEC-2001 (TREMBLrel. 19, Created)  
 DT 01-DEC-2001 (TREMBLrel. 19, Last sequence update)  
 DT 01-MAR-2002 (TREMBLrel. 20, Last annotation update)  
 DE Prion protein.  
 GN PRNP.  
 OS Budorcas taxicolor (taklin).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
 OC Bovidae; Caprinae; Budorcas.  
 NC NCB1\_TaxID=37181;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RA Seo S., Hara K., Kubosaki A., Nasu Y., Nishimura T., Saeki K.,  
 RA Matsunoto Y., Endo H., Onodera T.;  
 RT "Comparative analysis of the prion protein ORF nucleotide sequences  
 RT from two wild ruminants, mouflon and golden taklin.";  
 RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.  
 DR EMBL: AB060290; BAB69957.1; -.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion; 1.  
 DR PROSITE: PS00291; PRION\_1; UNKNOWN\_1.  
 DR PROSITE: PS00706; PRION\_2; UNKNOWN\_1.

SEQUENCE 256 AA; 27860 MW; 527E3332CD90BCD7 CRC64;

Query Match Similarity 93.2%; Score 41; DB 6; Length 256;  
Best Local Similarity 77.8%; Pred. No. 1.2;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
1 1 1 1 1 1 1 1 1 1  
Db 145 GSDYEDRY 153

## RESULT 12

ID 075942 PRELIMINARY; PRT; 285 AA.

AC 075942; PRELIMINARY; PRT; 285 AA.  
DT 01-NOV-1998 (TREMBLrel. 08, Created)  
DT 01-MAR-2001 (TREMBLrel. 16, Last sequence update)  
DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)  
DE Prion protein.  
GN PRNP.  
OS Homo sapiens (Human).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.  
OX NCBI\_TaxID=9606;

RP SEQUENCE FROM N.A.  
RA Cervenakova L., Halperin J.J., Stone G., Tallier I., Gibbs C.J. Jr.;  
RT "A new Creutzfeldt-Jakob disease family with 96bp insertion mutation  
in the PRNP gene."  
RL Submitted (NOV-2000) to the EMBL/GenBank/DBJ databases.  
DR EMBL: AF085477; AAC62750.2; -  
DR HSP: P04156; 1012  
DR InterPro: IPR000817; Prion.  
DR Pfam: PF00377; Prion; 1.  
DR PRINTS: PR00341; PRION.  
DR SMART: SM00157; PRP; 1.  
DR PROSITE: PS00291; PRION\_1; 1.  
DR PROSITE: PS00706; PRION\_2; 1.  
DR SEQUENCE 285 AA; 30769 MW; C14244B1183F653 CRC64;

Query Match Best Local Similarity 93.2%; Score 41; DB 4; Length 285;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
1 1 1 1 1 1 1 1 1 1  
Db 174 GSDYEDRY 182

## RESULT 13

ID 097020 PRELIMINARY; PRT; 124 AA.

AC 097020; PRELIMINARY; PRT; 124 AA.  
DT 01-MAY-2000 (TREMBLrel. 13, Created)  
DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)  
DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)  
DE Prion protein (Fragment).  
GN PRP.  
OS Varecia variegata variegata.  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Strepsirhini; Lemnidae; Varecia.  
OX NCBI\_TaxID=87289;

RP SEQUENCE FROM N.A.  
RA Gilch S., Schatzl H.M.;  
RT "Unusual prion protein octapeptide structure of the highly BSE-  
susceptible lemur monkey."  
RL Submitted (AUG-1999) to the EMBL/GenBank/DBJ databases.  
DR EMBL: AF177293; AAD54335.1; -  
DR HSP: P04925; IAG2.  
DR InterPro: IPR000817; Prion.  
DR Pfam: PF00377; Prion; 1.  
DR PRINTS: PR00341; PRION.

DR SMART: SM00157; PRP; 1.  
DR PROSITE: PS00291; PRION\_1; 1.  
FT NON\_TER 1 1  
FT NON\_TER 124 124  
SO SEQUENCE 124 AA; 13436 MW; CC2C8A5A855A7C94 CRC64;

Query Match Best Local Similarity 90.9%; Score 40; DB 6; Length 124;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
1 1 1 1 1 1 1 1 1 1  
Db 75 GNDYEDRY 83

## RESULT 14

ID 097694 PRELIMINARY; PRT; 185 AA.

AC 097694; PRELIMINARY; PRT; 185 AA.  
DT 01-MAY-1999 (TREMBLrel. 10, Created)  
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)  
DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)  
DE Prion protein (Fragment).  
GN PRP.  
OS Cervus nippon dybowskii.  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervoidae;  
OC Cervidae; Cervinae; Cervus.  
OX NCBI\_TaxID=88066;

RP SEQUENCE FROM N.A.  
RA MEDLINE-97317556; PubMed-9174569;  
RT "Schatzl H.M., Wopfinger F., Gilch S., von Brunn A., Jager G.;  
"Is codon 129 of prion protein polymorphic in human beings but not in  
animals?"  
RL Lancet 349:1603-1604(1997).  
RN [2]

RP SEQUENCE FROM N.A.  
RA MEDLINE-99303687; PubMed-10373359;  
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
RA Schwarz T.F., Werner T., Schatzl H.M.;  
RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
of flexible regions of the prion protein."  
RL J. Mol. Biol. 289:1163-1178(1999).

DR EMBL: AF113941; AAD13289.1; -  
DR HSP: P10279; 10WY  
DR InterPro: IPR002395; Kininogen.  
DR InterPro: IPR000817; Prion.  
DR Pfam: PF00377; Prion; 1.  
DR PRINTS: PR00341; KININOGEN.  
DR PRINTS: PR00341; PRION.  
DR SMART: SM00157; PRP; 1.  
DR PROSITE: PS00291; PRION\_1; 1.  
FT NON\_TER 1 1  
FT NON\_TER 185 185  
SO SEQUENCE 185 AA; 19870 MW; BB87C7658BC66E79 CRC64;

Query Match Best Local Similarity 90.9%; Score 40; DB 6; Length 185;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
1 1 1 1 1 1 1 1 1 1  
Db 121 GNDYEDRY 129

## RESULT 15

ID 097903 PRELIMINARY; PRT; 195 AA.

AC 097903; PRELIMINARY; PRT; 195 AA.  
DT 01-MAY-1999 (TREMBLrel. 10, Created)  
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)  
DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)

DE Prion protein (Fragment).  
GN PRP.  
OS Addax nasomaculatus.  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
OC Bovidae; Hippotraginae; Addax.  
OX NCBI\_TaxID=59515;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC TISSUE=PBL;  
RX MEDLINE-99303687; PubMed-10373359;  
RA Wopfner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
RA Schwarz T.F., Werner T., Schatzl H.M.;  
RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
of flexible regions of the prion protein.";  
RL J. Mol. Biol. 289:1163-1178(1999).  
DR EMBL; AF117309; AADI9980.1; -.  
DR HSSP; P10279; IDWY.  
DR InterPro; IPR002395; Kininogen.  
DR InterPro; IPR000817; Prion.  
DR Pfam; PF00377; Prion; 1.  
DR PRINTS; PRO0334; KININOGEN.  
DR PRINTS; PRO0341; PRION.  
DR SMART; SM00157; PRP; 1.  
DR PROSITE; PS00291; PRION\_1; 1.  
DR PROSITE; PS00706; PRION\_2; 1.  
FT NON\_TER 1  
FT TER 195  
SO SEQUENCE 195 AA; 21321 MW; 6A9BA6A7E1AFECAC9 CRC64;

Query Match 90.9%; Score 40; DB 6; Length 195;  
Best Local Similarity 77.8%; Pred. No. 1.5;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
| | | | | | | | | |  
Db 109 GNDYEDRY 117

Search completed: March 24, 2003, 17:22:11  
Job time : 20.6875 secs

GenCore version 5.1.4-p5.4578  
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## OM protein - protein search, using sw model

Run on: March 24, 2003, 17:20:26 ; Search time 8.625 Seconds  
(without alignments)  
30.702 Million cell updates/sec

Title: US-09-508-828B-1

Perfect score: 44

Sequence: 1 GXDXEDRY 9

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%  
Listing first 45 summaries

## Database :

- 1: /cgn2\_6/prodata/2/1aa/5A.COMB.pep.\*
- 2: /cgn2\_6/prodata/2/1aa/5B.COMB.pep.\*
- 3: /cgn2\_6/prodata/2/1aa/6A.COMB.pep.\*
- 4: /cgn2\_6/prodata/2/1aa/6B.COMB.pep.\*
- 5: /cgn2\_6/prodata/2/1aa/PCTUS.COMB.pep.\*
- 6: /cgn2\_6/prodata/2/1aa/backfile1.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	41	93.2	21	1	US-08-244-701B-43
2	41	93.2	21	1	US-09-076-721-43
3	41	93.2	25	1	US-08-244-701B-10
4	41	93.2	25	1	US-08-244-701B-12
5	41	93.2	25	4	US-09-076-721-10
6	41	93.2	25	4	US-09-076-721-12
7	41	93.2	26	1	US-08-244-701B-41
8	41	93.2	26	1	US-09-076-721-41
9	41	93.2	31	1	US-08-244-701B-7
10	41	93.2	31	1	US-08-244-701B-9
11	41	93.2	31	4	US-09-076-721-7
12	41	93.2	31	4	US-09-076-721-9
13	41	93.2	142	1	US-08-556-823-10
14	41	93.2	253	1	US-08-242-188-2
15	41	93.2	253	1	US-08-509-261A-2
16	41	93.2	253	1	US-08-660-626-8
17	41	93.2	253	1	US-08-692-892-2
18	41	93.2	253	2	US-08-713-939A-2
19	41	93.2	253	2	US-08-868-162A-22
20	41	93.2	253	4	US-09-031-168-8
21	41	93.2	253	4	US-09-128-450-20
22	41	93.2	253	4	US-09-036-579-2
23	41	93.2	253	4	US-09-823-494-20
24	41	93.2	253	4	US-09-550-374-2
25	41	93.2	263	1	US-08-242-188-3
26	41	93.2	263	1	US-08-509-261A-3
27	41	93.2	263	1	US-08-660-626-9

28	41	93.2	263	1	US-08-692-892-3	Sequence 3, App11
29	41	93.2	263	2	US-08-713-939A-3	Sequence 23, App11
30	41	93.2	263	2	US-08-868-162A-23	Sequence 9, App11
31	41	93.2	263	4	US-09-031-168-9	Sequence 3, App11
32	41	93.2	263	4	US-09-036-579-3	Sequence 3, App11
33	41	93.2	263	4	US-09-550-374-3	Sequence 21, App11
34	41	93.2	264	4	US-09-128-450-21	Sequence 21, App11
35	41	93.2	264	4	US-09-823-494-21	Sequence 42, App11
36	41	90.9	21	1	US-08-244-701B-42	Sequence 11, App11
37	40	90.9	21	1	US-09-076-721-42	Sequence 42, App11
38	40	90.9	25	1	US-08-244-701B-11	Sequence 65, App11
39	40	90.9	25	1	US-08-244-701B-65	Sequence 11, App11
40	40	90.9	25	4	US-09-076-721-11	Sequence 11, App11
41	40	90.9	25	4	US-09-076-721-65	Sequence 65, App11
42	40	90.9	31	1	US-08-244-701B-8	Sequence 8, App11
43	40	90.9	31	1	US-08-244-701B-53	Sequence 53, App11
44	40	90.9	31	4	US-09-076-721-8	Sequence 8, App11
45	40	90.9	31	4	US-09-076-721-53	Sequence 53, App11

## ALIGNMENTS

RESULT 1  
US-08-244-701B-43  
Sequence 43, Application US/08244701B  
Patent No. 5773572  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/244,701B  
FILING DATE: 02-JUN-1994  
CLASSIFICATION: 436  
ATTORNEY/AGENT INFORMATION:  
NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 43:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-244-701B-43

Query Match 93.2%; Score 41; DB 1; Length 21;  
Best Local Similarity 77.8%; Pred. No. 0.087;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
1 GXDXEDRY 9  
11 GXDXEDRY 19

RESULT 2  
US-09-076-721-43  
Sequence 43, Application US/09076721  
Patent No. 6379605  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/076,721  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/244,701  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 43:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-09-076-721-43

Query Match 93.2%; Score 41; DB 4; Length 21;  
Best Local Similarity 77.8%; Pred. No. 0.087;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXDXY 9  
DB 11 GSDYEDRY 19

RESULT 3  
US-08-244-701B-10  
Sequence 10, Application US/08244701B  
Patent No. 5773572  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.

ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/244,701B  
FILING DATE: 02-JUN-1994  
CLASSIFICATION: 436  
ATTORNEY/AGENT INFORMATION:  
NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 10:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 25 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 1  
OTHER INFORMATION: /label- X  
OTHER INFORMATION: /note- "X may be absent or present independently  
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 25  
OTHER INFORMATION: /label- Y  
OTHER INFORMATION: /note- "Y may be absent or present independently  
OTHER INFORMATION: of X and denotes one or more amino acid(s)"  
US-08-244-701B-10

Query Match 93.2%; Score 41; DB 1; Length 25;  
Best Local Similarity 77.8%; Pred. No. 0.1;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXDXY 9  
DB 12 GSDYEDRY 20

RESULT 4  
US-08-244-701B-12  
Sequence 12, Application US/08244701B  
Patent No. 5773572  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/244,701B  
FILING DATE: 02-JUN-1994

CLASSIFICATION: 436  
ATTORNEY/AGENT INFORMATION:  
NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 12:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 25 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 1  
OTHER INFORMATION: /label- X  
OTHER INFORMATION: /note- "X may be absent or present independently  
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 25  
OTHER INFORMATION: /label- Y  
OTHER INFORMATION: /note- "Y may be absent or present independently  
OTHER INFORMATION: of X and denotes one or more amino acid(s)"  
US-08-244-701B-12

Query Match 93.2%; Score 41; DB 1; Length 25;  
Best Local Similarity 77.8%; Pred. No. 0.1;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9  
DB 12 GSDYEDRY 20

RESULT 5  
US-09-076-721-10  
Sequence 10, Application US/09076721  
Patent No. 6379905  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/076,721  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/244,701  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 10:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 25 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 1  
OTHER INFORMATION: /label- X  
OTHER INFORMATION: /note- "X may be absent or present independently  
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 25  
OTHER INFORMATION: /label- Y  
OTHER INFORMATION: /note- "Y may be absent or present independently  
OTHER INFORMATION: of X and denotes one or more amino acid(s)"  
US-09-076-721-10

Query Match 93.2%; Score 41; DB 4; Length 25;  
Best Local Similarity 77.8%; Pred. No. 0.1;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9  
DB 12 GSDYEDRY 20

RESULT 6  
US-09-076-721-12  
Sequence 12, Application US/09076721  
Patent No. 6379905  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/076,721  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/244,701  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 12:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 25 amino acids

TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 1  
OTHER INFORMATION: /label-X  
OTHER INFORMATION: /note- "X may be absent or present independently"  
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 25  
OTHER INFORMATION: /label-Y  
OTHER INFORMATION: /note- "Y may be absent or present independently"  
OTHER INFORMATION: of X and denotes one or more amino acid(s)"  
US-09-076-721-41

Query Match 93.2%; Score 41; DB 4; Length 25;  
Best Local Similarity 77.8%; Pred. No. 0.1;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1 GDXEDRY 9  
DB 12 GSDYEDRY 20

RESULT 7  
US-08-244-701B-41  
Sequence 41, Application US/08244701B  
Patent No. 5773572  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/244,701B  
FILING DATE: 02-JUN-1994  
CLASSIFICATION: 436  
ATTORNEY/AGENT INFORMATION:  
NAME: Fannucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 41:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 26 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-244-701B-41

Query Match 93.2%; Score 41; DB 1; Length 26;  
Best Local Similarity 77.8%; Pred. No. 0.11;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9  
DB 10 GSDYEDRY 18

RESULT 8  
US-09-076-721-41  
Sequence 41, Application US/09076721  
Patent No. 6379905  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/076,721  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/244,701  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Fannucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 41:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 26 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-09-076-721-41

Query Match 93.2%; Score 41; DB 4; Length 26;  
Best Local Similarity 77.8%; Pred. No. 0.11;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9  
DB 10 GSDYEDRY 18

RESULT 9  
US-08-244-701B-7  
Sequence 7, Application US/08244701B  
Patent No. 5773572  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds



STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
OPERATING SYSTEM: IBM PC compatible  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/244,701B  
FILING DATE: 02-JUN-1994  
CLASSIFICATION: 436  
ATTORNEY/AGENT INFORMATION:  
NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 31 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 1  
OTHER INFORMATION: /label- X  
OTHER INFORMATION: /note- "X may be absent or present independently  
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 31  
OTHER INFORMATION: /label- Y  
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US-08-244-701B-7  
Query Match 93.2%; Score 41; DB 1; Length 31;  
Best Local Similarity 77.8%; Pred. No. 0.13;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1 GSDYEDRY 9  
Db 12 GSDYEDRY 20  
RESULT 10  
US-08-244-701B-9  
Sequence 9, Application US/08244701B  
Patent No. 5773572  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
OPERATING SYSTEM: IBM PC compatible  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/244,701  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/244,701  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:

SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/244,701B  
FILING DATE: 02-JUN-1994  
CLASSIFICATION: 436  
ATTORNEY/AGENT INFORMATION:  
NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 9:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 31 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 1  
OTHER INFORMATION: /label- X  
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LOCATION: 31  
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US-08-244-701B-9  
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Best Local Similarity 77.8%; Pred. No. 0.13;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1 GSDYEDRY 9  
Db 12 GSDYEDRY 20  
RESULT 11  
US-09-076-721-7  
Sequence 7, Application US/09076721  
Patent No. 6379905  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
OPERATING SYSTEM: IBM PC compatible  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/076,721  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/244,701  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:

NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNTE  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 31 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
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NAME/KEY: Modified-site  
LOCATION: 1  
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OTHER INFORMATION: of X and denotes one or more amino acid(s)  
US-09-076-721-9

Query Match 93.2%; Score 41; DB 4; Length 31;  
Best Local Similarity 77.8%; Pred. No. 0.13;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
DB 12 GSDYEDRY 20

RESULT 12  
US-09-076-721-9  
Sequence 9, Application US/09076721  
Patent No. 6379905  
GENERAL INFORMATION:  
APPLICANT: Flashlegh, Robert V.  
APPLICANT: Robson, Barry  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennle & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/076,721  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/244,701  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741

TELEX: 66141 PENNTE  
INFORMATION FOR SEQ ID NO: 9:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 31 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 1  
OTHER INFORMATION: /label=X  
OTHER INFORMATION: /note=X may be absent or present independently  
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NAME/KEY: Modified-site  
LOCATION: 31  
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OTHER INFORMATION: /note=Y may be absent or present independently  
OTHER INFORMATION: of X and denotes one or more amino acid(s)  
US-09-076-721-9

Query Match 93.2%; Score 41; DB 4; Length 31;  
Best Local Similarity 77.8%; Pred. No. 0.13;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9  
DB 12 GSDYEDRY 20

RESULT 13  
US-08-556-823-10  
Sequence 10, Application US/08556823  
Patent No. 5750361  
GENERAL INFORMATION:  
APPLICANT: Stanley B. Prusiner  
APPLICANT: Kiyotoshi Kaneko  
TITLE OF INVENTION: Formation and use of prion protein  
NUMBER OF SEQUENCES: 10  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson  
STREET: 2200 Sand Hill Road, Suite 100  
CITY: Menlo Park  
STATE: California  
COUNTRY: USA  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Asclit  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/556,823  
FILING DATE:  
CLASSIFICATION: 530  
ATTORNEY/AGENT INFORMATION:  
NAME: Valela Gregg  
REGISTRATION NUMBER: 35,127  
REFERENCE/DOCKET NUMBER: 07532/003001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 322-5070  
TELEFAX: (415) 854-0875  
INFORMATION FOR SEQ ID NO: 10:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 142 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-556-823-10

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Best Local Similarity 77.8%; Pred. No. 0.62;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1 GDXEDRY 9  
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Db 53 GSDYEDRY 61

RESULT 14  
US-08-242-188-2  
Sequence 2, Application US/08242188  
Patent No. 5565186  
GENERAL INFORMATION:  
APPLICANT: Prusiner, Stanley B.  
APPLICANT: Scott, Michael R.  
TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE  
TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Karl Boslovec  
STREET: 2200 Sand Hill Road  
CITY: Menlo Park  
STATE: CA  
COUNTRY: USA  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/242.188  
FILING DATE: 13-MAY-1994  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Boslovec, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 06510/014001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 854-5277  
TELEFAX: (415) 854-0875  
INFORMATION FOR SEQ ID NO. 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 253 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: HUMAN PRION PROTEIN, HuPrP  
US-08-242-188-2  
Query Match 93.2%; Score 41; DB 1; Length 253;  
Best Local Similarity 77.8%; Pred. No. 1.1;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1 GDXEDRY 9  
| | | | |  
Db 142 GSDYEDRY 150

NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Boslovec & Reed, LLP  
STREET: 285 Hamilton Avenue, Suite 200  
CITY: Palo Alto  
STATE: CA  
COUNTRY: USA  
ZIP: 94301  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FASTSEQ for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/509,261A  
FILING DATE: 31-JUL-1995  
CLASSIFICATION: 800  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER:  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Boslovec, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 6510-030001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 650-327-3400  
TELEFAX: 650-327-3231  
TELEX:  
INFORMATION FOR SEQ ID NO. 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 253 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-509-261A-2

Query Match 93.2%; Score 41; DB 1; Length 253;  
Best Local Similarity 77.8%; Pred. No. 1.1;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1 GDXEDRY 9  
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Db 142 GSDYEDRY 150

Search completed: March 24, 2003, 17:23:04  
job time : 8.625 secs

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GenCore version 5.1.4\_p5.4578  
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OM protein - protein search, using sw model

Run on: March 24, 2003, 17:23:11 ; Search time 8.0625 Seconds  
(without alignments)  
59.679 Million cell updates/sec

Title: US-09-508-828B-1  
Perfect score: 44  
Sequence: 1 GSDXEDRY 9

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 221153 seqs, 53462247 residues

Total number of hits satisfying chosen parameters: 221153

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%  
Listing first 45 summaries

Database : Published\_Applications\_AA.\*

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Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	41	93.2	161	10	US-09-745-003-9
2	41	93.2	162	10	US-09-745-003-10
3	41	93.2	253	10	US-09-904-987-3
4	41	93.2	253	10	US-09-919-172-57
5	41	93.2	253	10	US-09-943-906-2
6	41	93.2	256	9	US-10-109-551-2
7	41	93.2	263	10	US-09-943-906-3
8	41	93.2	164	9	US-10-209-194-2
9	40	90.9	255	10	US-09-745-003-7
10	40	90.9	255	10	US-09-943-906-4
11	40	90.9	256	9	US-10-109-551-4
12	40	90.9	256	9	US-10-109-551-6
13	40	90.9	256	9	US-10-109-551-8
14	40	90.9	256	9	US-10-109-551-10
15	39	88.6	163	10	US-09-745-003-11
16	39	88.6	164	10	US-09-745-003-12
17	39	88.6	254	9	US-10-106-574-5
18	39	88.6	254	9	US-10-106-574-6
19	39	88.6	254	9	US-10-106-574-7

20	39	88.6	254	9	US-10-106-574-8	Sequence 8, Appl1
21	39	88.6	254	10	US-09-943-906-1	Sequence 1, Appl1
22	39	88.6	439	9	US-10-115-984-2	Sequence 2, Appl1
23	33	75.0	46	9	US-09-939-780-4	Sequence 4, Appl1
24	33	75.0	46	10	US-09-147-761-4	Sequence 4, Appl1
25	33	75.0	1527	9	US-09-966-4228-9	Sequence 9, Appl1
26	30	68.2	165	10	US-09-815-242-11985	Sequence 1, Appl1
27	30	68.2	252	9	US-09-974-298-193	Sequence 193, App
28	30	68.2	434	10	US-09-881-457A-4	Sequence 4, Appl1
29	30	68.2	809	9	US-09-738-626-4944	Sequence 4944, Ap
30	30	68.2	833	9	US-10-014-436-3	Sequence 3, Appl1
31	30	68.2	979	9	US-09-884-001-4	Sequence 4, Appl1
32	30	68.2	1938	9	US-10-014-436-2	Sequence 2, Appl1
33	29	65.9	255	10	US-09-925-300-1218	Sequence 1218, Ap
34	29	65.9	315	10	US-09-912-717-3	Sequence 3, Appl1
35	29	65.9	319	9	US-10-161-418A-10	Sequence 10, Appl
36	29	65.9	319	9	US-10-161-418A-12	Sequence 12, Appl
37	29	65.9	647	9	US-10-086-464-2	Sequence 2, Appl1
38	29	65.9	691	9	US-10-086-464-4	Sequence 4, Appl1
39	29	65.9	691	10	US-09-815-242-12339	Sequence 12339, A
40	29	65.9	721	9	US-10-086-464-5	Sequence 5, Appl1
41	29	65.9	1039	10	US-09-900-237-14	Sequence 14, Appl
42	28	63.6	146	10	US-09-864-761-46804	Sequence 46804, A
43	28	63.6	268	10	US-09-765-272-140	Sequence 140, App
44	28	63.6	329	10	US-09-953-956-2	Sequence 2, Appl1
45	28	63.6	329	10	US-09-953-956-7	Sequence 7, Appl1

## ALIGNMENTS

RESULT 1  
US-09-745-003-9  
Sequence 9, Application US/09745003  
Patent No. US20020042122A1  
GENERAL INFORMATION:  
APPLICANT: Bazar, Fernando J  
TITLE OF INVENTION: Human Proteins; Related Reagents  
FILE REFERENCE: P1P2  
CURRENT APPLICATION NUMBER: US/09/745,003  
CURRENT FILING DATE: 2000-12-20  
NUMBER OF SEQ ID NOS: 13  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 9  
LENGTH: 161  
TYPE: PRT  
ORGANISM: bovine  
US-09-745-003-9

Query Match 93.2%; Score 41; DB 10; Length 161;  
Best Local Similarity 77.8%; Pred. No. 0.35;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GSDXEDRY 9  
DB 50 GSDXEDRY 58  
US-09-745-003-10  
Sequence 10, Application US/09745003  
Patent No. US20020042122A1  
GENERAL INFORMATION:  
APPLICANT: Bazar, Fernando J  
TITLE OF INVENTION: Human Proteins; Related Reagents  
FILE REFERENCE: P1P2  
CURRENT APPLICATION NUMBER: US/09/745,003  
CURRENT FILING DATE: 2000-12-20  
NUMBER OF SEQ ID NOS: 13  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 10  
LENGTH: 162  
TYPE: PRT

ORGANISM: primate  
US-09-745-003-10

Query Match  
Best Local Similarity 77.8%; Score 41; DB 10; Length 162;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9  
DB 51 GSDYEDRY 59

RESULT 3

US-09-904-987-3  
Sequence 3, Application US/09904987  
Patent No. US20020037908A1  
GENERAL INFORMATION:  
APPLICANT: NO. US20020037908A1actyl, Inc.  
TITLE OF INVENTION: Methods and compositions for controlling pathological and prepath  
FILE REFERENCE: 42108/26146  
CURRENT APPLICATION NUMBER: US/09/904, 987  
CURRENT FILING DATE: 2001-07-12  
NUMBER OF SEQ ID NOS: 7  
SOFTWARE: PatentIn version 3.0  
SEQ ID NO 3  
LENGTH: 253  
TYPE: PRT  
ORGANISM: homo sapiens  
PUBLICATION INFORMATION:  
DATABASE ACCESSION NUMBER: NCBI ENTREZ / XM\_009567  
DATABASE ENTRY DATE: 2001-04-17  
RELEVANT RESIDUES: (1)..(253)  
US-09-904-987-3

Query Match  
Best Local Similarity 77.8%; Score 41; DB 10; Length 253;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9  
DB 142 GSDYEDRY 150

RESULT 4

US-09-919-172-57  
Sequence 57, Application US/09919172  
Patent No. US20020119463A1  
GENERAL INFORMATION:  
APPLICANT: Faris, Mary  
TITLE OF INVENTION: PROSTATE CANCER MARKERS  
FILE REFERENCE: PA-0036 US  
CURRENT APPLICATION NUMBER: US/09/919,172  
CURRENT FILING DATE: 2001-07-30  
PRIORITY APPLICATION NUMBER: 60/222,469  
PRIOR FILING DATE: 2000-07-28  
NUMBER OF SEQ ID NOS: 102  
SOFTWARE: PERL Program  
SEQ ID NO 57  
LENGTH: 253  
TYPE: PRT  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: misc\_feature  
OTHER INFORMATION: Incyte ID NO. US20020119463A1 1256895CD1  
US-09-919-172-57

Query Match  
Best Local Similarity 93.2%; Score 41; DB 10; Length 253;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1 GDXEDRY 9

DB 142 GSDYEDRY 150

RESULT 5

US-09-943-906-2  
Sequence 2, Application US/09943906  
Patent No. US20020150571A1  
GENERAL INFORMATION:  
APPLICANT: Prusiner, Stanley B.  
Williamson, R. Anthony  
Burton, Dennis R.

TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP  
NUMBER OF SEQUENCES: 86  
CORRESPONDENCE ADDRESS:  
ADDRESS: Fish & Richardson P.C.  
STREET: 2200 Sand Hill Road  
CITY: Menlo Park  
STATE: CA  
COUNTRY: U.S.A.  
ZIP: 94025

COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq Version 2.0

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/943,906  
FILING DATE: 30-Aug-2001  
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 09/550,374  
FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:  
NAME: Bozicevic, Karl

REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 06510/059001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-854-5277  
TELEFAX: 415-854-0875  
TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:

LENGTH: 253 amino acids  
TYPE: amino acid  
STRANDEDNESS: single

TOPOLOGY: linear  
MOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 2:  
US-09-943-906-2

Query Match  
Best Local Similarity 93.2%; Score 41; DB 10; Length 253;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9  
DB 142 GSDYEDRY 150

RESULT 6

US-10-109-551-2  
Sequence 2, Application US/10109551  
Publication No. US20020194635A1  
GENERAL INFORMATION:  
APPLICANT: DUNNE, PATRICK W.  
PIEDRAHITA, JORGE

TITLE OF INVENTION: TRANSGENIC ANIMALS RESISTANT TO TRANSMISSIBLE  
FILE REFERENCE: TANK:207US  
CURRENT APPLICATION NUMBER: US/10/109,551  
CURRENT FILING DATE: 2002-03-28  
PRIOR APPLICATION NUMBER: 60/280,549

PRIOR FILING DATE: 2001-03-30  
NUMBER OF SEQ ID NOS: 10  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 2  
LENGTH: 256  
TYPE: PRP  
ORGANISM: Bos taurus  
US-10-109-551-2

Query Match 93.2% Score 41; DB 9; Length 256;  
Best Local Similarity 77.8%; Pred. No. 0.56;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9  
| | | | |  
Db 145 GSDYEDRY 153

## RESULT 7

US-09-943-906-3  
Sequence 3, Application US/09943906  
Patent No. US20020150571A1  
GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.  
Williamson, R. Anthony  
Burton, Dennis R.  
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PRP  
NUMBER OF SEQUENCES: 86  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 2200 Sand Hill Road  
CITY: Menlo Park  
STATE: CA  
COUNTRY: U.S.A.  
ZIP: 94025

COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/943,906  
FILING DATE: 30-Aug-2001  
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 09/550,374  
FILING DATE: <Unknown>  
ATTORNEY/AGENT INFORMATION:  
NAME: Bozicevic, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 06510/059001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-854-5277  
TELEFAX: 415-854-0875  
TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 263 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
SEQUENCE DESCRIPTION: SEQ ID NO: 3:  
US-09-943-906-3

Query Match 93.2% Score 41; DB 10; Length 263;  
Best Local Similarity 77.8%; Pred. No. 0.58;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9  
| | | | |  
Db 152 GSDYEDRY 160

RESULT 8  
US-10-209-194-2  
Sequence 2, Application US/10209194  
Publication No. US20030051264A1  
GENERAL INFORMATION:

APPLICANT: LILJEDAHN, MONIKA  
ASPLAND, SIMON ERIC  
TITLE OF INVENTION: GENETICALLY MODIFIED COWS HAVING REDUCED  
FILE REFERENCE: BIOBANK 007A  
CURRENT APPLICATION NUMBER: US/10/209,194  
CURRENT FILING DATE: 2002-07-29  
PRIOR APPLICATION NUMBER: 60/309,222  
PRIOR FILING DATE: 2001-07-31  
PRIOR APPLICATION NUMBER: 60/367,091  
PRIOR FILING DATE: 2002-03-21  
NUMBER OF SEQ ID NOS: 15  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 2  
LENGTH: 264  
TYPE: PRP  
ORGANISM: Bos Taurus  
US-10-209-194-2

Query Match 93.2% Score 41; DB 9; Length 264;  
Best Local Similarity 77.8%; Pred. No. 0.58;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9  
| | | | |  
Db 153 GSDYEDRY 161

## RESULT 9

US-09-745-003-7  
Sequence 7, Application US/09745003  
Patent No. US2002042122A1  
GENERAL INFORMATION:  
APPLICANT: Bazan, Fernando J  
TITLE OF INVENTION: Human Proteins; Related Reagents  
FILE REFERENCE: PRP2  
CURRENT APPLICATION NUMBER: US/09/745,003  
CURRENT FILING DATE: 2000-12-20  
NUMBER OF SEQ ID NOS: 13  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 7  
LENGTH: 161  
TYPE: PRP  
ORGANISM: sheep  
US-09-745-003-7

Query Match 90.9% Score 40; DB 10; Length 161;  
Best Local Similarity 77.8%; Pred. No. 0.55;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9  
| | | | |  
Db 50 GNDYEDRY 58

RESULT 10  
US-09-943-906-4  
Sequence 4, Application US/09943906  
Patent No. US20020150571A1  
GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.  
Williamson, R. Anthony  
Burton, Dennis R.  
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PRP  
NUMBER OF SEQUENCES: 86  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.

STREET: 2200 Sand Hill Road  
CITY: Menlo Park  
STATE: CA  
COUNTRY: U.S.A.  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/943,906  
FILING DATE: 30-Aug-2001  
CLASSIFICATION: <Unknown>  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: 09/550,374  
FILING DATE: <Unknown>  
ATTORNEY/AGENT INFORMATION:  
NAME: Bozicevic, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 06510/059001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-854-5277  
TELEFAX: 415-854-0875  
TELEX: <Unknown>  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 255 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
MOLECULE TYPE: peptide  
SEQUENCE DESCRIPTION: SEQ ID NO: 4:  
US-09-943-906-4

Query Match 90.9%; Score 40; DB 10; Length 255;  
Best Local Similarity 77.8%; Pred. No. 0.89;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9  
| | | | |  
DB 144 GNDYEDRY 152

RESULT 11  
US-10-109-551-4  
Sequence 4, Application US/10109551  
Publication No. US20020194635A1  
GENERAL INFORMATION:  
APPLICANT: DUNNE, PATRICK W.  
APPLICANT: PIEDRAHITA, JORGE  
TITLE OF INVENTION: TRANSGENIC ANIMALS RESISTANT TO TRANSMISSIBLE  
FILE REFERENCE: TANK:207US  
CURRENT APPLICATION NUMBER: US/10/109,551  
CURRENT FILING DATE: 2002-03-28  
PRIORITY APPLICATION NUMBER: 60/280,549  
PRIOR FILING DATE: 2001-03-30  
NUMBER OF SEQ ID NOS: 10  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 4  
LENGTH: 256  
TYPE: PRT  
ORGANISM: Ovis aries  
US-10-109-551-4

Query Match 90.9%; Score 40; DB 9; Length 256;  
Best Local Similarity 77.8%; Pred. No. 0.89;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9  
| | | | |  
DB 145 GNDYEDRY 153

RESULT 12  
US-10-109-551-6  
Sequence 6, Application US/10109551  
Publication No. US20020194635A1  
GENERAL INFORMATION:  
APPLICANT: DUNNE, PATRICK W.  
APPLICANT: PIEDRAHITA, JORGE  
TITLE OF INVENTION: TRANSGENIC ANIMALS RESISTANT TO TRANSMISSIBLE  
FILE REFERENCE: TANK:207US  
CURRENT APPLICATION NUMBER: US/10/109,551  
CURRENT FILING DATE: 2002-03-28  
PRIORITY APPLICATION NUMBER: 60/280,549  
PRIOR FILING DATE: 2001-03-30  
NUMBER OF SEQ ID NOS: 10  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 6  
LENGTH: 256  
TYPE: PRT  
ORGANISM: Odocolleus virginianus  
US-10-109-551-6

Query Match 90.9%; Score 40; DB 9; Length 256;  
Best Local Similarity 77.8%; Pred. No. 0.89;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9  
| | | | |  
DB 145 GNDYEDRY 153

RESULT 13  
US-10-109-551-8  
Sequence 8, Application US/10109551  
Publication No. US20020194635A1  
GENERAL INFORMATION:  
APPLICANT: DUNNE, PATRICK W.  
APPLICANT: PIEDRAHITA, JORGE  
TITLE OF INVENTION: TRANSGENIC ANIMALS RESISTANT TO TRANSMISSIBLE  
FILE REFERENCE: TANK:207US  
CURRENT APPLICATION NUMBER: US/10/109,551  
CURRENT FILING DATE: 2002-03-28  
PRIORITY APPLICATION NUMBER: 60/280,549  
PRIOR FILING DATE: 2001-03-30  
NUMBER OF SEQ ID NOS: 10  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 8  
LENGTH: 256  
TYPE: PRT  
ORGANISM: Odocolleus hemionus  
US-10-109-551-8

Query Match 90.9%; Score 40; DB 9; Length 256;  
Best Local Similarity 77.8%; Pred. No. 0.89;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9  
| | | | |  
DB 145 GNDYEDRY 153

RESULT 14  
US-10-109-551-10  
Sequence 10, Application US/10109551  
Publication No. US20020194635A1  
GENERAL INFORMATION:  
APPLICANT: DUNNE, PATRICK W.  
APPLICANT: PIEDRAHITA, JORGE  
TITLE OF INVENTION: TRANSGENIC ANIMALS RESISTANT TO TRANSMISSIBLE  
FILE REFERENCE: TANK:207US  
CURRENT APPLICATION NUMBER: US/10/109,551  
CURRENT FILING DATE: 2002-03-28  
PRIORITY APPLICATION NUMBER: 60/280,549  
PRIOR FILING DATE: 2001-03-30  
NUMBER OF SEQ ID NOS: 10  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 10  
LENGTH: 256  
TYPE: PRT  
ORGANISM: Odocolleus hemionus  
US-10-109-551-10

Query Match 90.9%; Score 40; DB 9; Length 256;  
Best Local Similarity 77.8%; Pred. No. 0.89;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9  
| | | | |  
DB 145 GNDYEDRY 153



FILE REFERENCE: TAMK:207US  
; CURRENT APPLICATION NUMBER: US/10/109,551  
; CURRENT FILING DATE: 2002-03-28  
; PRIOR APPLICATION NUMBER: 60/280,549  
; PRIOR FILING DATE: 2001-03-30  
; NUMBER OF SEQ ID NOS: 10  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 10  
; LENGTH: 256  
; TYPE: PRT  
; ORGANISM: Cervus elaphus  
US-10-109-551-10

Query Match 90.9%; Score 40; DB 9; Length 256;  
Best Local Similarity 77.8%; Pred. No. 0.89;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GNDXEDRY 9  
| | | | |  
Db 145 GNDXEDRY 153

RESULT 15  
US-09-745-003-11  
; Sequence 11, Application US/09745003  
; Patent No. US2002004212A1  
; GENERAL INFORMATION:  
; APPLICANT: Bazan, Fernando J  
; TITLE OF INVENTION: Human Proteins; Related Reagents  
; FILE REFERENCE: PRP2  
; CURRENT APPLICATION NUMBER: US/09/745,003  
; CURRENT FILING DATE: 2000-12-20  
; NUMBER OF SEQ ID NOS: 13  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 11  
; LENGTH: 163  
; TYPE: PRT  
; ORGANISM: Hamster sp.  
US-09-745-003-11

Query Match 88.6%; Score 39; DB 10; Length 163;  
Best Local Similarity 77.8%; Pred. No. 0.89;  
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 1 GNDXEDRY 9  
| | | | |  
Db 51 GNDXEDRY 59

Search completed: March 24, 2003, 17:25:04  
Job time : 9.0625 secs

1000

GenCore version 5.1.4.p5.4578  
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OM protein - protein search, using sw model

Run on: March 24, 2003, 17:16:57 ; Search time 37.1042 Seconds

(without alignments)  
46.686 Million cell updates/sec

Title: US-09-508-828b-2

Perfect score: 58

Sequence: 1 QYRXPXDXMXQ 13

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A\_Geneseq.101002.\*

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2: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1981.DAT.\*  
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23: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2002.DAT.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	51	87.9	27	14	AA198010
2	51	87.9	27	14	AA198011
3	51	87.9	28	14	AA198013
4	51	87.9	28	14	AA198014
5	51	87.9	28	14	AA198015
6	51	87.9	31	14	AA198007
7	51	87.9	31	14	AA198008
8	51	87.9	31	14	AA198009
9	51	87.9	33	18	AA198545
10	51	87.9	33	21	AA198546

11	51	87.9	33	21	AA198547	Rabbit prion prote
12	51	87.9	33	21	AA198548	Mouse prion prote
13	51	87.9	33	21	AA198549	Cattle prion prote
14	51	87.9	33	21	AA198550	Sheep prion prote
15	51	87.9	142	18	AA198551	Prion protein prote
16	51	87.9	178	19	AA198552	Peptide sequences
17	51	87.9	208	21	AA198553	Mouse prion prote
18	51	87.9	208	21	AA198554	Human prion prote
19	51	87.9	208	21	AA198555	Mouse prion prote
20	51	87.9	208	21	AA198556	Human prion prote
21	51	87.9	211	22	AA198557	Human prion prote
22	51	87.9	217	21	AA198558	Amino acid sequenc
23	51	87.9	217	21	AA198559	Cattle prion prote
24	51	87.9	219	19	AA198560	Bovine prion prote
25	51	87.9	219	20	AA198561	Bovine prion prote
26	51	87.9	245	22	AA198562	Monkey prion prote
27	51	87.9	245	22	AA198563	Cercopithe prion p
28	51	87.9	250	22	AA198564	Rabbit prion prote
29	51	87.9	253	17	AA198565	Human prion prote
30	51	87.9	253	19	AA198566	Human prion prote
31	51	87.9	253	20	AA198567	Human prion prote
32	51	87.9	253	20	AA198568	Human prion prote
33	51	87.9	253	21	AA198569	Human prion prote
34	51	87.9	253	21	AA198570	Human prion prote
35	51	87.9	253	21	AA198571	Human prion prote
36	51	87.9	253	21	AA198572	Human prion prote
37	51	87.9	253	22	AA198573	Human prion prote
38	51	87.9	253	22	AA198574	Human prion prote
39	51	87.9	253	22	AA198575	Human prion prote
40	51	87.9	253	22	AA198576	Human prion prote
41	51	87.9	253	22	AA198577	Human prion prote
42	51	87.9	253	22	AA198578	Human prion prote
43	51	87.9	253	22	AA198579	Human prion prote
44	51	87.9	253	22	AA198580	Human prion prote
45	51	87.9	253	22	AA198581	Human prion prote

#### ALIGNMENTS

RESULT 1  
ID AAR38010 standard; protein; 27 AA.  
AC AAR38010;  
XX  
DE 14-OCT-1993 (first entry)  
XX  
XX Prion protein region C #4.  
DE  
XX Antigen; prion; protein; region; frame shift; repeat; mutation; PrP;  
XX F5a; F5b; subfragment; antibody; treatment; spongiform encephalopathy;  
XX human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;  
XX immune system; PrPsc; rat-to-inverso peptide; enzymatic degradation;  
XX resistance.  
XX  
XX Synthetic.  
XX  
XX WO9311155-A.  
XX  
XX 10-JUN-1993.  
XX  
XX 03-DEC-1992; 92WC-G802246.  
XX  
XX 03-DEC-1991; 91GB-0025747.  
XX  
XX 10-JUL-1992; 92GB-0014663.  
XX  
XX (PROT-) PROTEUS MOLECULAR DESIGN LTD.  
XX  
XX Fishleigh RV, Mee RP, Robson B;  
XX  
XX WPI; 1993-196994/24.  
XX

PT New polypeptide(s) contg. antigenic site of prion protein -  
 PT useful for treatment and diagnosis of mammalian encephalopathies  
 PT e.g. Creutzfeldt-Jacob disease and Kuru  
 PS Claim 15; Page 67; 82pp; English.  
 XX  
 CC The sequences given in AAR38007-11 represent polypeptides derived  
 CC from an antigenic site, region C, of a prion protein. Prion  
 CC proteins comprise six regions of interest (A-F), and two related  
 CC frame shift peptides sequences caused by a repeating section in  
 CC region E having a nucleic acid coding sequence frame shift mutation  
 CC of +1 (Fsa) or -1 (Fsb). These peptides and subfragments of these  
 CC (see AAR38012-15), and antibodies raised against these, may be used to  
 CC treat or prevent spongiform encephalopathy in humans, sheep or cattle.  
 CC They can be used to block cellular binding and aggregation of prion  
 CC proteins and to stimulate the mammalian immune system. These peptides  
 CC may be used to distinguish between the normal form of prion protein  
 CC (PrpC) and the scrapie-associated form (PrpSc). These peptides may  
 CC include rare or synthetic amino acids or a ratio-inverso peptide  
 CC modification to improve resistance to enzymatic degradation.  
 CC  
 SQ Sequence 27 AA:  
 Query Match 87.9%; Score 51; DB 14; Length 27;  
 Best Local Similarity 69.2%; Pred. NO. 0.0026;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 OY 1 OYVYXPXDXYXNQ 13  
 |||||  
 DB 8 OYVYRPVDKYSNQ 20  
 RESULT 2  
 AAR38011  
 ID AAR38011 standard; protein: 27 AA.  
 AC AAR38011;  
 XX  
 DT 14-OCT-1993 (first entry)  
 DE  
 XX Prion protein region C #5.  
 KM Antigen; prion; protein; region; frame shift; repeat; mutation; PrpC;  
 KM Fsa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;  
 KM human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;  
 KM immune system; PrpSc; ratio-inverso peptide; enzymatic degradation;  
 KM resistance.  
 XX  
 OS Synthetic.  
 XX  
 FN WO9311155-A.  
 XX  
 PD 10-JUN-1993.  
 XX  
 PE 03-DEC-1992; 92WO-GB02246.  
 XX  
 PR 03-DEC-1991; 91GB-0025747.  
 PR 10-JUL-1992; 92GB-0014663.  
 XX  
 PA (PROT-) PROTEUS MOLECULAR DESIGN LTD.  
 XX  
 PI Fishleigh RV, Mee RP, Robson B;  
 XX  
 DR WPI; 1993-196994/24.  
 XX  
 PT New polypeptide(s) contg. antigenic site of prion protein -  
 PT useful for treatment and diagnosis of mammalian encephalopathies  
 PT e.g. Creutzfeldt-Jacob disease and Kuru  
 XX  
 PS Claim 15; Page 67; 82pp; English.  
 CC The sequences given in AAR38007-11 represent polypeptides derived  
 CC from an antigenic site, region C, of a prion protein. Prion

CC proteins comprise six regions of interest (A-F), and two related  
 CC frame shift peptides sequences caused by a repeating section in  
 CC region E having a nucleic acid coding sequence frame shift mutation  
 CC of +1 (Fsa) or -1 (Fsb). These peptides and subfragments of these  
 CC (see AAR38012-15), and antibodies raised against these, may be used to  
 CC treat or prevent spongiform encephalopathy in humans, sheep or cattle.  
 CC They can be used to block cellular binding and aggregation of prion  
 CC proteins and to stimulate the mammalian immune system. These peptides  
 CC may be used to distinguish between the normal form of prion protein  
 CC (PrpC) and the scrapie-associated form (PrpSc). These peptides may  
 CC include rare or synthetic amino acids or a ratio-inverso peptide  
 CC modification to improve resistance to enzymatic degradation.  
 CC  
 SQ Sequence 27 AA:  
 Query Match 87.9%; Score 51; DB 14; Length 27;  
 Best Local Similarity 69.2%; Pred. NO. 0.0026;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 OY 1 OYVYXPXDXYXNQ 13  
 |||||  
 DB 8 OYVYRPVDKYSNQ 20  
 RESULT 3  
 AAR38013  
 ID AAR38013 standard; protein: 28 AA.  
 AC AAR38013;  
 XX  
 DT 14-OCT-1993 (first entry)  
 DE  
 XX Prion protein region C subfragment #1.  
 KM Antigen; prion; protein; region; frame shift; repeat; mutation; PrpC;  
 KM Fsa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;  
 KM human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;  
 KM immune system; PrpSc; ratio-inverso peptide; enzymatic degradation;  
 KM resistance.  
 XX  
 OS Synthetic.  
 XX  
 FN WO9311155-A.  
 XX  
 PD 10-JUN-1993.  
 XX  
 PE 03-DEC-1992; 92WO-GB02246.  
 XX  
 PR 03-DEC-1991; 91GB-0025747.  
 PR 10-JUL-1992; 92GB-0014663.  
 XX  
 FT Key Location/Qualifiers  
 FT Misc-difference 1 /note= "One or more residues or may be absent"  
 FT Misc-difference 2 /note= "May be absent"  
 FT Misc-difference 3 /note= "May be absent"  
 FT Misc-difference 4 /note= "May be absent"  
 FT Misc-difference 5 /note= "May be absent"  
 FT Misc-difference 24 /note= "May be absent"  
 FT Misc-difference 25 /note= "May be absent"  
 FT Misc-difference 26 /note= "May be absent"  
 FT Misc-difference 27 /note= "May be absent"  
 FT Misc-difference 28 /note= "May be absent"  
 FT /note= "One or more residue or may be absent"

PA (PROT-) PROTEUS MOLECULAR DESIGN LTD.  
 XX  
 P1 Fishleigh RV, Mee RP, Robson B;  
 XX  
 DR WPI: 1993-196994/24.  
 XX  
 PT New polypeptide(s) contg. antigenic site of prion protein -  
 PT useful for treatment and diagnosis of mammalian encephalopathies  
 PT e.g. Creutzfeldt-Jacob disease and kuru  
 PS  
 PS Claim 17; Page 67; 82pp; English.  
 XX  
 CC The sequences given in AAR38012-15 represent polypeptide subfragments  
 CC derived from an antigenic site, region C, of a prion protein. Prion  
 CC proteins comprise six regions of interest (A-F), and two related  
 CC frame shift peptide sequences caused by a repeating section in  
 CC region E having a nucleic acid coding sequence frame shift mutation  
 CC of +1 (Fsa) or -1 (Fsb). These subfragments or the full length  
 CC peptides (see AAR38006-11), and antibodies raised against these, may be  
 CC used to treat or prevent spongiform encephalopathy in humans, sheep or  
 CC cattle. They can be used to block cellular binding and aggregation of  
 CC prion proteins and to stimulate the mammalian immune system. These  
 CC peptides may be used to distinguish between the normal form of prion  
 CC protein (PrPc) and the scrapie-associated form (PrPsc). These peptides  
 CC may include rare or synthetic amino acids or a ratio-inverso peptide  
 CC modification to improve resistance to enzymatic degradation.  
 CC  
 SQ Sequence 28 AA:  
 Query Match 87.9%; Score 51; DB 14; Length 28;  
 Best Local Similarity 69.2%; Pred. No. 0.0027; 4; Indels 0; Gaps 0;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1 QVYYPXDXYYXNQ 13  
 |||||  
 Db 6 QVYRPVDPQYSNQ 18  
 RESULT 4  
 ID AAR38014 standard; protein; 28 AA.  
 XX  
 AC AAR38014;  
 XX  
 DT 14-OCT-1993 (first entry)  
 XX  
 DE Prion protein region C subfragment #2.  
 XX  
 KW Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;  
 KW Fsa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;  
 KW human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;  
 KW immune system; PrPsc; ratio-inverso peptide; enzymatic degradation;  
 KW resistance.  
 KW  
 XX Synthetic.  
 XX  
 OS  
 FH Key Location/Qualifiers  
 FH Misc-difference 1 /note= "One or more residues or may be absent"  
 FT Misc-difference 2 /note= "May be absent"  
 FT Misc-difference 3 /note= "May be absent"  
 FT Misc-difference 4 /note= "May be absent"  
 FT Misc-difference 5 /note= "May be absent"  
 FT Misc-difference 24 /note= "May be absent"  
 FT Misc-difference 25 /note= "May be absent"  
 FT Misc-difference 26 /note= "May be absent"  
 FT Misc-difference 26 /note= "May be absent"

FT Misc-difference 27 /note= "May be absent"  
 FT Misc-difference 28 /note= "One or more residue or may be absent"  
 XX  
 XX W09311155-A.  
 XX  
 PD 10-JUN-1993.  
 XX  
 XX 03-DEC-1992; 92WO-GB02246.  
 XX  
 XX 03-DEC-1991; 91GB-0025747.  
 PR 10-JUL-1992; 92GB-0014663.  
 XX  
 PA (PROT-) PROTEUS MOLECULAR DESIGN LTD.  
 XX  
 P1 Fishleigh RV, Mee RP, Robson B;  
 XX  
 DR WPI: 1993-196994/24.  
 XX  
 PT New polypeptide(s) contg. antigenic site of prion protein -  
 PT useful for treatment and diagnosis of mammalian encephalopathies  
 PT e.g. Creutzfeldt-Jacob disease and kuru  
 PS  
 PS Claim 17; Page 67; 82pp; English.  
 XX  
 CC The sequences given in AAR38012-15 represent polypeptide subfragments  
 CC derived from an antigenic site, region C, of a prion protein. Prion  
 CC proteins comprise six regions of interest (A-F), and two related  
 CC frame shift peptide sequences caused by a repeating section in  
 CC region E having a nucleic acid coding sequence frame shift mutation  
 CC of +1 (Fsa) or -1 (Fsb). These subfragments or the full length  
 CC peptides (see AAR38006-11), and antibodies raised against these, may be  
 CC used to treat or prevent spongiform encephalopathy in humans, sheep or  
 CC cattle. They can be used to block cellular binding and aggregation of  
 CC prion proteins and to stimulate the mammalian immune system. These  
 CC peptides may be used to distinguish between the normal form of prion  
 CC protein (PrPc) and the scrapie-associated form (PrPsc). These peptides  
 CC may include rare or synthetic amino acids or a ratio-inverso peptide  
 CC modification to improve resistance to enzymatic degradation.  
 CC  
 SQ Sequence 28 AA:  
 Query Match 87.9%; Score 51; DB 14; Length 28;  
 Best Local Similarity 69.2%; Pred. No. 0.0027; 4; Indels 0; Gaps 0;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1 QVYYPXDXYYXNQ 13  
 |||||  
 Db 6 QVYRPVDPQYSNQ 18  
 RESULT 5  
 ID AAR38015 standard; protein; 28 AA.  
 XX  
 AC AAR38015;  
 XX  
 DT 14-OCT-1993 (first entry)  
 XX  
 DE Prion protein region C subfragment #3.  
 XX  
 KW Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;  
 KW Fsa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;  
 KW human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;  
 KW immune system; PrPsc; ratio-inverso peptide; enzymatic degradation;  
 KW resistance.  
 KW  
 XX Synthetic.  
 XX  
 OS  
 FH Key Location/Qualifiers  
 FH Misc-difference 1 /note= "One or more residues or may be absent"  
 FT Misc-difference 1 /note= "One or more residues or may be absent"

DT 14-OCT-1993 (first entry)

Query Match	87.98;	Score 51;	DB 14;	Length 31;
Best Local Similarity	69.28;	Pred. No.	0.003;	

Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPKXKXNQ 13  
 |||||  
 Db 9 QVYRPVDRYSNQ 21

## RESULT 7

AAK38008  
 ID AAK38008 standard; protein: 31 AA.

AC AAK38008;

DT 14-OCT-1993 (first entry)

DE Prion protein region C #2.

XX Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;  
 KW Fsa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;  
 KW human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;  
 KW immune system; PrPsc; ratio-inverso peptide; enzymatic degradation;  
 KW resistance.

XX Synthetic.

OS Key Location/Qualifiers

FT Misc-difference 1 /note- "One or more residues or may be absent"

FT Misc-difference 2 /note- "May be absent"

FT Misc-difference 3 /note- "May be absent"

FT Misc-difference 4 /note- "May be absent"

FT Misc-difference 5 /note- "May be absent"

FT Misc-difference 27 /note- "May be absent"

FT Misc-difference 28 /note- "May be absent"

FT Misc-difference 29 /note- "May be absent"

FT Misc-difference 30 /note- "May be absent"

FT Misc-difference 31 /note- "May be absent"

XX W0311155-A.

PD 10-JUN-1993.

PF 03-DEC-1992; 92WO-GB02246.

PR 03-DEC-1991; 91GB-0025747.

PR 10-JUL-1992; 92GB-0014663.

XX (PROT-) PROTEUS MOLECULAR DESIGN LTD.

PI Fishleigh RV, Mee RP, Robson B;

DR WPI; 1993-196994/24.

XX New polypeptide(s) contg. antigenic site of prion protein -  
 PT useful for treatment and diagnosis of mammalian encephalopathies  
 PT e.g. Creutzfeldt-Jacob disease and kuru

PS Claim 14; Page 66; 82pp; English.

XX The sequences given in AAK38007-11 represent polypeptides derived  
 CC from an antigenic site, region C, of a prion protein. Prion  
 CC proteins comprise six regions of interest (A-F), and two related  
 CC frame shift peptide sequences caused by a repeating section in  
 CC region E having a nucleic acid coding sequence frame shift mutation

CC of +1 (Fsa) or -1 (Fsb). These peptides and subfragments of these  
 CC (see AAK38012-15), and antibodies raised against these, may be used to  
 CC treat or prevent spongiform encephalopathy in humans, sheep or cattle.  
 CC They can be used to block cellular binding and aggregation of prion  
 CC proteins and to stimulate the mammalian immune system. These peptides  
 CC may be used to distinguish between the normal form of prion protein  
 CC (PrPc) and the scrapie-associated form (PrPsc). These peptides may  
 CC include rare or synthetic amino acids or a ratio-inverso peptide  
 CC modification to improve resistance to enzymatic degradation.

SO Sequence 31 AA;

Query Match 87.9%; Score 51; DB 14; Length 31;

Best Local Similarity 69.2%; Pred. No. 0.003;

Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPKXKXNQ 13  
 |||||  
 Db 9 QVYRPVDRYSNQ 21

## RESULT 8

AAK38009  
 ID AAK38009 standard; protein: 31 AA.

AC AAK38009;

DT 14-OCT-1993 (first entry)

DE Prion protein region C #3.

XX Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;  
 KW Fsa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;  
 KW human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;  
 KW immune system; PrPsc; ratio-inverso peptide; enzymatic degradation;  
 KW resistance.

XX Synthetic.

OS Key Location/Qualifiers

FT Misc-difference 1 /note- "One or more residues or may be absent"

FT Misc-difference 2 /note- "May be absent"

FT Misc-difference 3 /note- "May be absent"

FT Misc-difference 4 /note- "May be absent"

FT Misc-difference 5 /note- "May be absent"

FT Misc-difference 27 /note- "May be absent"

FT Misc-difference 28 /note- "May be absent"

FT Misc-difference 29 /note- "May be absent"

FT Misc-difference 30 /note- "May be absent"

FT Misc-difference 31 /note- "May be absent"

XX W0311155-A.

PD 10-JUN-1993.

PF 03-DEC-1992; 92WO-GB02246.

PR 03-DEC-1991; 91GB-0025747.

PR 10-JUL-1992; 92GB-0014663.

XX (PROT-) PROTEUS MOLECULAR DESIGN LTD.  
 PI Fishleigh RV, Mee RP, Robson B;

XX WPI; 1993-196994/24.  
 XX  
 CC New polypeptide(s) contg. antigenic site of prion protein -  
 CC useful for treatment and diagnosis of mammalian encephalopathies  
 CC e.g. Creutzfeldt-Jacob disease and Kuru  
 CC  
 CC Claim 14; Page 67; 82pp; English.  
 CC  
 CC The sequences given in AAR38007-11 represent polypeptides derived  
 CC from an antigenic site, region C, of a prion protein. Prion  
 CC proteins comprise six regions of interest (A-F), and two related  
 CC frame shift peptides sequences caused by a repeating section in  
 CC region E having a nucleic acid coding sequence frame shift mutation  
 CC of +1 (F8a) or -1 (F8b). These peptides and subfragments of these  
 CC (see AAR38012-15), and antibodies raised against these, may be used to  
 CC treat or prevent spongiform encephalopathy in humans, sheep or cattle.  
 CC They can be used to block cellular binding and aggregation of prion  
 CC proteins and to stimulate the mammalian immune system. These peptides  
 CC may be used to distinguish between the normal form of prion protein  
 CC (PrP<sup>c</sup>) and the scrapie-associated form (PrP<sup>Sc</sup>). These peptides may  
 CC include rare or synthetic amino acids or a ratio-inverse peptide  
 CC modification to improve resistance to enzymatic degradation.  
 CC  
 CC Sequence 31 AA;  
 CC  
 CC

Query Match 87.9%; Score 51; DB 14; Length 31;  
 Best Local Similarity 69.2%; Pred. No. 0.003;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPDXXNQG 13  
 |||||  
 DB 9 QVYRPMDETSNQ 21

RESULT 9  
 ID AAW35545  
 XX AAW35545 standard; peptide; 33 AA.  
 XX  
 AC AAW35545;  
 XX

XX 22-APR-1998 (first entry)  
 DT  
 XX Immunization DNDPC SEQ ID NO:89 from WO9738011.  
 DE  
 XX

XX T-cell stimulatory peptide; immunogen; non-dendritic; carrier; tumour;  
 KW scaffold; inhibition; metastasis; wound healing; solid phase.  
 KM  
 XX Synthetic.  
 OS

XX WO9738011-A1.  
 PN

XX 16-OCT-1997.  
 PD

XX 03-APR-1997; 97WO-DE0146.  
 PF

XX 03-APR-1996; 96DK-0000398.  
 PR

XX (PEPR-) PEPRESEARCH AS.  
 PA

XX Heegaard PMH, Jakobsen PH;  
 PI

XX WPI; 1997-512645/47.  
 DR

XX Non-dendritic peptide carrier linked to a solid phase - useful as a  
 PT diagnostic agent and as a scaffold for production of chemical  
 PT derivatives  
 PT

XX Example 31; Page 156; 262pp; English.  
 PS

XX A non-dendritic peptide carrier (A) has been developed which is coupled  
 CC through a linker to a solid phase, forming a complex of (A)-solid phase.  
 CC Where (A) comprises 10-50 amino acids capable of forming a secondary

CC structure in a benign buffer after liberation from the solid phase, and  
 CC further the (A)-solid phase complex comprises an immunogenic substance  
 CC and/or an immune mediator coupled on (A). The present sequence  
 CC represents a peptide used in an example from the present invention. An  
 CC (A)-solid phase complex can be used as a scaffold for the production of  
 CC chemical derivatives, characterised by covalently attaching molecules at  
 CC attachment points. Alternatively (A) is used as a scaffold peptide for  
 CC the incorporation into an immunostimulating complex (iscom) resulting an  
 CC (A)-iscom complex which is used for the chemical coupling of antigenic  
 CC substances in an aqueous solution by conjugation. (A) derivatised with  
 CC one or more peptides having fibronectin-, laminin- or vitronectin-like  
 CC binding activities can be used for the promotion of cell-attachment to  
 CC plastic surfaces, in particular to inhibit tumour growth and metastasis,  
 CC and for promotion of wound healing. Also a derivatised (A) can be used  
 CC for the selection of specifically binding aptamers or as a diagnostic  
 CC agent. Such diagnostic (A) molecules could be used to detect molecules  
 CC derived from or indicative of pregnancy or of a disease, such as an  
 CC infectious, autoimmune or cancerous disease.  
 CC  
 CC Sequence 33 AA;  
 CC  
 CC

Query Match 87.9%; Score 51; DB 18; Length 33;  
 Best Local Similarity 69.2%; Pred. No. 0.0032;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPDXXNQG 13  
 |||||  
 DB 19 QVYRPMDETSNQ 31

RESULT 10  
 ID AAB15054  
 XX AAB15054 standard; peptide; 33 AA.  
 XX  
 AC AAB15054;  
 XX

XX 18-DEC-2000 (first entry)  
 DT

XX Human prion protein peptide homologous to ovine sequence 145-177.  
 DE

XX Prion; PrP; guanidine thiocyanate; gdnSCN; TSE; BSE;  
 KW transmissible spongiform encephalopathy; antibody;  
 KW bovine spongiform encephalopathy; sheep; cattle; human; mouse;  
 KW hamster; rabbit.  
 XX

XX Homo sapiens.  
 OS

XX WO200048003-A1.  
 PN

XX 17-AUG-2000.  
 PD

XX 09-FEB-2000; 2000WO-NL00079.  
 PF

XX 11-FEB-1999; 99EP-0200391.  
 PR

XX (DIEN-) STICHTING DIENST LANDBOUWKUNDIG ONDERZOE.  
 PA

XX Garssen GJ, Jacobs JG, Langeveld JPM, Smits MA, Van Keulen LJM;  
 PI Schreuder BEC, Bossers A;  
 PI

XX WPI; 2000-506099/45.  
 DR

XX Use of guanidine thiocyanate for reducing risk of false-positive  
 PT results in testing mammalian sample for aberrant prion protein, useful  
 PT for detection of transmissible spongiform encephalopathies -  
 PT

XX Disclosure; Fig 2; 49pp; English.  
 PS

XX The present invention relates to a method for reducing the risk of  
 CC scoring a false positive test result in testing a sample for aberrant  
 CC prion protein. The method involves the use of guanidine thiocyanate  
 CC (gdnSCN) or its functional equivalent. This test is highly useful for  
 CC testing for transmissible spongiform encephalopathies (TSEs) such as



CC BSE (bovine spongiform encephalopathy). The method allows a faster, simpler and more reliable method for monitoring cattle and sheep for the presence of aberrant prion protein before it reaches the human and animal food chain. In the invention antipeptide antibodies were raised against sheep prion protein peptides. The present sequence is the human prion protein sequence homologous to the sheep peptide indicated.

SO Sequence 33 AA;

Query Match 87.9%; Score 51; DB 21; Length 33;

Best Local Similarity 69.2%; Pred. No. 0.0032; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYXNQ 13  
 DB 19 QVYRPVDDQYSNQ 31

# RESULT 11

AAB15055 standard; Peptide; 33 AA.

AC AAB15055;

DT 18-DEC-2000 (first entry)

DE Rabbit prion protein peptide homologous to ovine sequence 145-177.

KW Prion; PrP; guanidine thiocyanate; gdnSCN; TSE; BSE;

KM transmissible spongiform encephalopathy; antibody;

OS bovine spongiform encephalopathy; sheep; cattle; human.

OS Oryctolagus cuniculus.

PN WO200048003-A1.

PD 17-AUG-2000.

PF 09-FEB-2000; 2000WO-NL00079.

PR 11-FEB-1999; 99EP-0200391.

PA (DIEN-) STICHTING DIENST LANDBOUWKUNDIG ONDERZOE.

PI Garssen GJ, Jacobs JG, Langeveld JPM, Smits MA, Van Keulen LJM;

PI Schreuder BEC, Bosiers A;

DR WPI: 2000-506099/45.

PS Use of guanidine thiocyanate for reducing risk of false-positive

PT results in testing mammalian sample for aberrant prion protein, useful

PT for detection of transmissible spongiform encephalopathies -

PS Disclosure: Fig 2; 49pp; English.

CC The present invention relates to a method for reducing the risk of

CC scoring a false positive result in testing a sample for aberrant

CC prion protein. The method involves the use of guanidine thiocyanate

CC (gdnSCN) or its functional equivalent. This test is highly useful for

CC testing for transmissible spongiform encephalopathies (TSEs) such as

CC BSE (bovine spongiform encephalopathy). The method allows a faster,

CC simpler and more reliable method for monitoring cattle and sheep for

CC the presence of aberrant prion protein before it reaches the human

CC and animal food chain. In the invention antipeptide antibodies were

CC raised against sheep prion protein peptides. The present sequence is

CC the rabbit prion protein sequence homologous to the sheep peptide

CC indicated.

SO Sequence 33 AA;

Query Match 87.9%; Score 51; DB 21; Length 33;

Best Local Similarity 69.2%; Pred. No. 0.0032;

Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYXNQ 13  
 DB 19 QVYRPVDDQYSNQ 31

# RESULT 12

AAB15057 standard; Peptide; 33 AA.

AC AAB15057;

DT 18-DEC-2000 (first entry)

DE Mouse prion protein peptide homologous to ovine sequence 145-177.

KW Prion; PrP; guanidine thiocyanate; gdnSCN; TSE; BSE;

KM transmissible spongiform encephalopathy; antibody;

OS bovine spongiform encephalopathy; sheep; cattle; human.

OS Mus sp.

PN WO200048003-A1.

PD 17-AUG-2000.

PF 09-FEB-2000; 2000WO-NL00079.

PR 11-FEB-1999; 99EP-0200391.

PA (DIEN-) STICHTING DIENST LANDBOUWKUNDIG ONDERZOE.

PI Garssen GJ, Jacobs JG, Langeveld JPM, Smits MA, Van Keulen LJM;

PI Schreuder BEC, Bosiers A;

DR WPI: 2000-506099/45.

PS Use of guanidine thiocyanate for reducing risk of false-positive

PT results in testing mammalian sample for aberrant prion protein, useful

PT for detection of transmissible spongiform encephalopathies -

PS Disclosure: Fig 2; 49pp; English.

CC The present invention relates to a method for reducing the risk of

CC scoring a false positive result in testing a sample for aberrant

CC prion protein. The method involves the use of guanidine thiocyanate

CC (gdnSCN) or its functional equivalent. This test is highly useful for

CC testing for transmissible spongiform encephalopathies (TSEs) such as

CC BSE (bovine spongiform encephalopathy). The method allows a faster,

CC simpler and more reliable method for monitoring cattle and sheep for

CC the presence of aberrant prion protein before it reaches the human

CC and animal food chain. In the invention antipeptide antibodies were

CC raised against sheep prion protein peptides. The present sequence is

CC the mouse prion protein sequence homologous to the sheep peptide

CC indicated.

SO Sequence 33 AA;

Query Match 87.9%; Score 51; DB 21; Length 33;

Best Local Similarity 69.2%; Pred. No. 0.0032;

Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYXNQ 13  
 DB 19 QVYRPVDDQYSNQ 31

RESULT 13

AAB15058 standard; Peptide; 33 AA.

AC AAB15058;

XX 18-DEC-2000 (first entry)  
 DT XX  
 DE Cattle prion protein peptide homologous to ovine sequence 145-177.  
 XX  
 XX Prion; PrP; guanidine thiocyanate; gdnSCN; TSE; BSE;  
 KM transmissible spongiform encephalopathy; antibody;  
 PA bovine spongiform encephalopathy; sheep; cattle; human.  
 XX  
 OS Bos taurus.  
 XX  
 PN WO200048003-A1.  
 PD 17-AUG-2000.  
 XX  
 XX 09-FEB-2000; 2000MO-NL00079.  
 PF  
 XX 11-FEB-1999; 99EP-0200391.  
 PR  
 XX (DIEN-) STICHTING DIENST LANDBOUWKUNDIG ONDERZOE.  
 PA  
 XX Garssen GJ, Jacobs JG, Langeveld JPM, Smits MA, Van Keulen LJM,  
 PI Schreuder BEC, Bossers A;  
 DR WPI: 2000-506099/45.  
 XX  
 XX Use of guanidine thiocyanate for reducing risk of false-positive  
 PT results in testing mammalian sample for aberrant prion protein, useful  
 PT for detection of transmissible spongiform encephalopathies -  
 XX  
 XX Disclosure: Fig 2; 49pp; English.  
 PS  
 XX The present invention relates to a method for reducing the risk of  
 CC scoring a false positive test result in testing a sample for aberrant  
 CC prion protein. The method involves the use of guanidine thiocyanate  
 CC (gdnSCN) or its functional equivalent. This test is highly useful for  
 CC testing for transmissible spongiform encephalopathies (TSEs) such as  
 CC BSE (bovine spongiform encephalopathy). The method allows a faster,  
 CC simpler and more reliable method for monitoring cattle and sheep for  
 CC the presence of aberrant prion protein before it reaches the human  
 CC and animal food chain. In the invention antipeptide antibodies were  
 CC raised against sheep prion protein peptides. The present sequence is  
 CC the cattle prion protein sequence homologous to the sheep peptide  
 CC indicated.  
 CC  
 SQ Sequence 33 AA;  
 XX  
 XX Query Match 87.9%; Score 51; DB 21; Length 33;  
 XX Best Local Similarity 69.2%; Pred. No. 0.0032;  
 XX Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 OY 1 QVYXPXDXYNQ 13  
 DB 19 QVYRPVDRYSNQ 31  
 XX  
 XX RESULT 14  
 XX AAB15059  
 ID AAB15059 standard; Peptide; 33 AA.  
 AC AAB15059;  
 XX  
 XX 18-DEC-2000 (first entry)  
 DT XX  
 DE Sheep prion protein peptide from amino acids 145-177.  
 XX  
 XX Prion; PrP; guanidine thiocyanate; gdnSCN; TSE; BSE;  
 KM transmissible spongiform encephalopathy; antibody;  
 KM bovine spongiform encephalopathy; sheep; cattle; human.  
 XX  
 OS Ovis aries.  
 XX  
 PN WO200048003-A1.

XX 17-AUG-2000.  
 PD XX  
 DE 09-FEB-2000; 2000MO-NL00079.  
 XX  
 XX 11-FEB-1999; 99EP-0200391.  
 PR  
 XX (DIEN-) STICHTING DIENST LANDBOUWKUNDIG ONDERZOE.  
 PA  
 XX Garssen GJ, Jacobs JG, Langeveld JPM, Smits MA, Van Keulen LJM,  
 PI Schreuder BEC, Bossers A;  
 DR WPI: 2000-506099/45.  
 XX  
 XX Use of guanidine thiocyanate for reducing risk of false-positive  
 PT results in testing mammalian sample for aberrant prion protein, useful  
 PT for detection of transmissible spongiform encephalopathies -  
 XX  
 XX Disclosure: Fig 2; 49pp; English.  
 PS  
 XX The present invention relates to a method for reducing the risk of  
 CC scoring a false positive test result in testing a sample for aberrant  
 CC prion protein. The method involves the use of guanidine thiocyanate  
 CC (gdnSCN) or its functional equivalent. This test is highly useful for  
 CC testing for transmissible spongiform encephalopathies (TSEs) such as  
 CC BSE (bovine spongiform encephalopathy). The method allows a faster,  
 CC simpler and more reliable method for monitoring cattle and sheep for  
 CC the presence of aberrant prion protein before it reaches the human  
 CC and animal food chain. In the invention antipeptide antibodies were  
 CC raised against sheep prion protein peptides such as the present  
 CC sequence.  
 CC  
 SQ Sequence 33 AA;  
 XX  
 XX Query Match 87.9%; Score 51; DB 21; Length 33;  
 XX Best Local Similarity 69.2%; Pred. No. 0.0032;  
 XX Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 OY 1 QVYXPXDXYNQ 13  
 DB 19 QVYRPVDRYSNQ 31  
 XX  
 XX RESULT 15  
 XX AAM17686  
 ID AAM17686 standard; peptide; 142 AA.  
 AC AAM17686;  
 XX  
 XX 14-JAN-1998 (first entry)  
 DT XX  
 DE Prion protein peptide Hu 90-231.  
 XX  
 XX Prion protein; PrP; alpha helical domain; screening; inhibition;  
 KM binding; scrapie; bovine spongiform encephalopathy; BSE; CJD;  
 KM Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;  
 KM Gerstmann-Straussler-Scheinker disease; hamster; human.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO9716728-A1.  
 PD 09-MAY-1997.  
 XX  
 XX 28-OCT-1996; 96MO-US17462.  
 PF  
 XX 02-NOV-1995; 95US-0556823.  
 PR  
 XX (REGC ) UNIV CALIFORNIA.  
 PA  
 XX Cohen FE, Kaneko K, Prusiner SB;  
 PI WPI: 1997-272248/24.  
 DR

XX Prion proteins (PrPs) having at least one alpha-helical domain -  
PT used in assays for screening compounds able to inhibit or decrease  
PT the binding of PrP peptide(s) to cellular prion proteins or  
PT peptide(s)

XX PS Claim 11; Page 7-38; 50pp; English.

XX The present sequence represents a prion protein (PrP) peptide.  
CC PrP has an ability to induce a conformational change in cellular  
CC prion protein (PrP-c). Methods, for screening compounds which  
CC inhibit the binding of PrP-c to a PrP peptide, are used for screening  
CC for drugs that may be useful in the treatment prion-related disease  
e.g. scrapie, BSE (bovine spongiform encephalopathy), CJD  
CC (Creutzfeldt-Jakob disease), Kuru, GSS (Gerstmann-Strausler-Scheinker  
CC disease) and FFI (fatal familial insomnia).

XX SO Sequence 142 AA:

Query Match 87.9%; Score 51; DB 18; Length 142;

Best Local Similarity 69.2%; Pred. No. 0.015;

Matches 9; Conservative 0; Mismatches 4; Indels 0; Caps 0;

OY 1 QVYXXPXDXNMQ 13

DB 71 QVYRPMDEYSNQ 83

Search completed: March 24, 2003, 17:19:41  
Job time : 38.1042 secs

10

11

12

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OM protein - protein search, using sw model

Run on: March 24, 2003, 17:22:16 ; Search time 16.25 Seconds  
(without alignments)  
76,908 Million cell updates/sec

Title: US-09-508-828b-2  
Perfect score: 58  
Sequence: 1 QVYXPDXNYXNQ 13

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues  
Total number of hits satisfying chosen parameters: 283224

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000  
Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database :  
1: PIR73:\*  
2: PIR1:\*  
3: PIR3:\*  
4: PIR4:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	51	87.9	236	2	A53892
2	51	87.9	239	2	S53633
3	51	87.9	241	2	S71056
4	51	87.9	241	2	S71048
5	51	87.9	245	2	S53627
6	51	87.9	245	2	S71045
7	51	87.9	252	2	161848
8	51	87.9	252	2	S53631
9	51	87.9	252	2	JC6175
10	51	87.9	253	1	U7HU
11	51	87.9	253	2	137032
12	51	87.9	253	2	184423
13	51	87.9	253	2	S53618
14	51	87.9	253	2	S53619
15	51	87.9	253	2	S53620
16	51	87.9	253	2	S71055
17	51	87.9	253	2	S53623
18	51	87.9	253	2	S53624
19	51	87.9	253	2	S53625
20	51	87.9	253	2	S53614
21	51	87.9	253	2	S53616
22	51	87.9	254	2	A23544
23	51	87.9	256	2	JU0268
24	51	87.9	256	2	S37149
25	51	87.9	256	2	A54281
26	51	87.9	257	2	JQ1900
27	51	87.9	260	2	S53629
28	51	87.9	264	2	S37137
29	51	87.9	264	2	A54330

30	50	86.2	232	2	S71041	major prion protei
31	50	86.2	252	2	S53634	major prion protei
32	50	86.2	254	1	U7HYIH	major prion Prp-Sc
33	50	86.2	254	2	A34759	prion protein - Ch
34	50	86.2	254	2	B34759	prion protein - go
35	50	86.2	257	2	A23545	major prion Prp27-
36	46	79.3	253	2	161847	major prion protei
37	46	79.3	253	2	S53635	prion protein - si
38	46	79.3	253	2	S53617	hypothetical prote
39	39	67.2	400	2	S76066	hypothetical prote
40	37	63.8	295	2	B82674	conserved hypotnet
41	37	63.8	458	2	T25115	hypothetical prote
42	36	62.1	146	2	E69773	conserved hypotnet
43	36	62.1	396	2	PQ0813	glycoprotein E1 -
44	36	62.1	568	2	S42225	major envelope gly
45	36	62.1	584	2	A49596	genome polypeptide

## ALIGNMENTS

RESULT 1  
A53892  
Prion-related protein - rat (fragment)  
C:Species: Rattus norvegicus (Norway rat)  
C:Date: 07-Oct-1994 #sequence\_revision 07-Oct-1994 #text\_change 13-Aug-1999  
C:Accession: A53892  
R:Info: Y.C.: Tokens: 2; Lfm, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.  
Lab. Invest. 57, 370-374, 1987  
A:Title: Cloning of rat "prion-related protein" cDNA.  
A:Reference number: A53892; MVID:88037055; PMID:2889848  
A:Accession: A53892  
A:Status: preliminary  
A:Molecule type: mRNA  
A:Residues: 1-226 <L1A>  
A:Superfamily: major prion protein

Query Match 87.9%; Score 51; DB 2; Length 226;  
Best local Similarity 69.2%; Pred. No. 0.005;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPDXNYXNQ 13  
DB 132 QVYXPDXNYXNQ 144

RESULT 2  
S53633  
Major prion protein - doucoucouli (fragment)  
C:Species: Actus trivirgatus (doucoucouli, night monkey, owl monkey)  
C:Date: 28-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 13-Aug-1999  
C:Accession: S53633; S71042  
R:Schuetz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
J. Mol. Biol. 245, 362-374, 1995  
A:Title: Prion protein gene variation among primates.  
A:Reference number: S53614; MVID:95139066; PMID:7837269  
A:Accession: S53633  
A:Status: nucleic acid sequence not shown  
A:Molecule type: DNA  
A:Residues: 1-239 <SCH>  
A:Cross-references: EMBL:U08293  
R:Schuetz, H.M.  
Submitted to the EMBL Data Library, April 1994  
A:Reference number: S71041

A:Accession: S71042  
A:Molecule type: DNA  
A:Residues: 1-202, 'E', 204-239 <SCW>  
A:Cross-references: EMBL:U08293; NID:9474344; PIDN:AAG50082.1; PID:9474345  
C:Superfamily: major prion protein  
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane  
Query Match 87.9%; Score 51; DB 2; Length 239;

Best Local Similarity 69.2%; Pred. No. 0.0053;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPDXYXNQ 13  
|||||  
Db 152 QVYRVPDQXNQ 164

## RESULT 3

S71056

Major prion protein - mandrill (fragment)

C:Species: Papio sphinx, Mandrillus sphinx (mandrill)

C&gt;Date: 27-Oct-1996 #sequence, revision 14-Feb-1997 #text\_change 13-Aug-1999

C:Accession: S71056; S53621

R:Schatzl, H.M.

Submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71056

A:Molecule type: DNA

A:Residues: 1-241 &lt;SCH&gt;

A:Cross-references: EMBL:U08303; NID:9474364; PIDN:AMC50091.1; PID:9474365

R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53621

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-203, 'R', 205-240 &lt;SCW&gt;

A:Cross-references: EMBL:U08303

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane protein

Query Match 87.9%; Score 51; DB 2; Length 241;  
Best Local Similarity 69.2%; Pred. No. 0.0053;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPDXYXNQ 13  
|||||  
Db 153 QVYRVPDQXNQ 165

## RESULT 4

S71048

Major prion protein - Callicebus moloch (fragment)

C:Species: Callicebus moloch

C&gt;Date: 27-Oct-1996 #sequence, revision 07-Feb-1997 #text\_change 13-Aug-1999

C:Accession: S71048; S53632

R:Schatzl, H.M.

Submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71048

A:Molecule type: DNA

A:Residues: 1-241 &lt;SCH&gt;

A:Cross-references: EMBL:U08312; NID:9475585; PIDN:AMC50100.1; PID:9475586

R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53632

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-203, 'R', 205-240 &lt;SCW&gt;

A:Cross-references: EMBL:U08312

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane protein

Query Match 87.9%; Score 51; DB 2; Length 241;  
Best Local Similarity 69.2%; Pred. No. 0.0053;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPDXYXNQ 13  
|||||

Db 153 QVYRVPDQXNQ 165

## RESULT 5

S53627

Major prion protein - green monkey

C:Species: Cercopithecus aethiops (green monkey, grivet)

C&gt;Date: 28-Oct-1996 #sequence, revision 07-Feb-1997 #text\_change 13-Aug-1999

C:Accession: S53627; S71043

R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53627

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-245 &lt;SCH&gt;

A:Cross-references: EMBL:U08291

R:Schatzl, H.M.

Submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71043

A:Molecule type: DNA

A:Residues: 1-10, 'V', 12-202, 'E', 204-245 &lt;SCW&gt;

A:Cross-references: EMBL:U08291; NID:9474340; PIDN:AMC50080.1; PID:9474341

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane protein

Query Match 87.9%; Score 51; DB 2; Length 245;  
Best Local Similarity 69.2%; Pred. No. 0.0054;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPDXYXNQ 13  
|||||  
Db 152 QVYRVPDQXNQ 164

## RESULT 6

S71045

Major prion protein - Cercopithecus diana

C:Species: Cercopithecus diana

C&gt;Date: 14-Feb-1997 #sequence, revision 14-Feb-1997 #text\_change 13-Aug-1999

C:Accession: S71045; S53628

R:Schatzl, H.M.

Submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71045

A:Molecule type: DNA

A:Residues: 1-245 &lt;SCH&gt;

A:Cross-references: EMBL:U08292; NID:9474342; PIDN:AMC50081.1; PID:9474343

R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53628

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 8-10, 'L', 12-202, 'R', 204-239 &lt;SCW&gt;

A:Cross-references: EMBL:U08292

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane protein

Query Match 87.9%; Score 51; DB 2; Length 245;  
Best Local Similarity 69.2%; Pred. No. 0.0054;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPDXYXNQ 13  
|||||  
Db 152 QVYRVPDQXNQ 164

## RESULT 7

I61848

major prion protein precursor - common squirrel monkey  
 C:Species: Saimiri sciureus (common squirrel monkey)  
 C>Date: 31-May-1996 #sequence\_revision 31-May-1996 #text\_change 13-Aug-1999  
 C:Accession: 161848  
 R:Cervanekova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D.  
 Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994  
 A:Title: Infectious amyloid precursor gene sequences in primates used for experimental  
 A:Reference number: 136907; MUID:95083661; PMID:7991600  
 A:Accession: 161848  
 A:Status: preliminary; translated from GB/EMBL/DBJ  
 A:Molecule type: DNA  
 A:Residues: 1-252 <RES>  
 A:Cross-references: EMBL:U15165; NID:g5595852; PIDN:AAA6636.1; PID:g5595853  
 C:Superfamily: major prion protein

Query Match 87.9%; Score 51; DB 2; Length 252;  
 Best Local Similarity 69.2%; Pred. No. 0.0056;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXKXNQ 13  
 |||||  
 Db 159 QVYRPVQYNSQ 171

## RESULT 8

major prion protein - brown capuchin

C:Species: Cebus apella (brown capuchin, black-capped capuchin)  
 C>Date: 28-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 13-Aug-1999  
 C:Accession: S53631; S71044  
 R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.  
 A:Reference number: S53614; MUID:95139066; PMID:7837269  
 A:Accession: S53631  
 A:Status: nucleic acid sequence not shown  
 A:Molecule type: DNA

A:Residues: 1-252 <SCH>  
 A:Cross-references: EMBL:U08295  
 R:Schaezel, H.M.  
 Submitted to the EMBL Data Library, April 1994

A:Reference number: S71041  
 A:Accession: S71044  
 A:Molecule type: DNA

A:Residues: 1-209, 'E', 211-252 <SCW>  
 A:Cross-references: EMBL:U08295; NID:g474348; PIDN:AA050084.1; PID:g474349

C:Superfamily: major prion protein  
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane pro

Query Match 87.9%; Score 51; DB 2; Length 252;  
 Best Local Similarity 69.2%; Pred. No. 0.0056;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXKXNQ 13  
 |||||  
 Db 159 QVYRPVQYNSQ 171

## RESULT 9

prion protein - rabbit

C:Species: Oryctolagus cuniculus (domestic rabbit)  
 C>Date: 11-Apr-1997 #sequence\_revision 09-May-1997 #text\_change 13-Aug-1999  
 C:Accession: JC6175  
 R:Loftus, B.; Rogers, M.  
 Gene 184, 215-219, 1997

A:Title: Characterization of a prion protein (PrP) gene from rabbit: a species with appa  
 A:Reference number: JC6175; MUID:97183665; PMID:9031631  
 A:Accession: JC6175  
 A:Molecule type: DNA

A:Residues: 1-252 <LOF>  
 A:Cross-references: GB:U08334; NID:g1490412; PIDN:AA048697.1; PID:g1490413  
 C:Comment: This protein is a cellular protein. It is involved in the neurodegenerative p

C:Genetics:  
 A:Gene: PrP  
 C:Superfamily: major prion protein  
 C:Keywords: disulfide bond; prion

Query Match 87.9%; Score 51; DB 2; Length 252;  
 Best Local Similarity 69.2%; Pred. No. 0.0056;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXKXNQ 13  
 |||||  
 Db 159 QVYRPVQYNSQ 171

## RESULT 10

major prion protein precursor - human

N:Alternate names: 11k amyloid protein; 27-30k statoglycoprotein; PrP 27-30; PrP 33-3  
 C:Species: Homo sapiens (man)  
 C>Date: 25-Oct-1987 #sequence\_revision 12-Apr-1996 #text\_change 16-Jun-2000  
 C:Accession: A24173; A40372; A05017; S14078; I54322; I68597; I58135; I59184; I79633;  
 R:Kretschmar, H.A.; Stowring, L.E.; Westaway, D.; Stubblefield, W.H.; Prusiner, S.B.;  
 DNA 5, 315-324, 1986

A:Title: Molecular cloning of a human prion protein cDNA.  
 A:Reference number: A24173; MUID:86300093; PMID:3755672  
 A:Accession: A24173  
 A:Molecule type: mRNA

A:Residues: 1-253 <KRE>  
 A:Cross-references: GB:M13899; NID:g190467; PIDN:AA60182.1; PID:g190468

R:Puckett, C.; Concannon, P.; Casey, C.; Hood, L.  
 Am. J. Hum. Genet. 49, 320-329, 1991

A:Title: Genomic structure of the human prion protein gene.  
 A:Reference number: A40372; MUID:91328137; PMID:1678248  
 A:Accession: A40372

A:Status: not compared with conceptual translation  
 A:Molecule type: DNA

A:Residues: 1-80, 89-253 <PUC>  
 A:Cross-references: GB:X63416; NID:g747846; PIDN:CA58442.1; PID:g747847  
 A:Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could n

R:Liao, Y.C.J.; Lebo, R.V.; Clawson, G.A.; Smuckler, E.A.  
 Science 233, 364-367, 1986

A:Reference number: A05017; MUID:86261778; PMID:3014653  
 A:Accession: A05017  
 A:Molecule type: mRNA

A:Residues: 8-117, 119-253 <LIA>  
 A:Cross-references: GB:PD0015; NID:g220015; PIDN:BAA0011.1; PID:g220016; GB:M1367;

R:Tagliavini, F.; Prelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Far  
 EMBO J. 10, 513-519, 1991

A:Title: Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana kindred)  
 A:Reference number: S14078; MUID:91160504; PMID:1672107  
 A:Accession: S14078  
 A:Molecule type: protein

A:Residues: 58-72, 'X', 74-76, 'XX', 79, 'XXX', 83-86, 111-128, 'V', 130-150 <TAG>  
 R:Diedrich, J.F.; Knopman, D.S.; List, J.F.; Olson, K.; Frey, W.H.  
 Hum. Mol. Genet. 1, 443-444, 1992

A:Title: Deletion in the prion protein gene in a demented patient.  
 A:Reference number: I54322; MUID:93250789; PMID:1363802  
 A:Accession: I54322

A:Status: preliminary; translated from GB/EMBL/DBJ  
 A:Molecule type: DNA

A:Residues: 9-83, 92-240 <RES>  
 A:Cross-references: GB:M1929; NID:g190517; PIDN:AA859442.1; PID:g190518  
 A:Accession: I68597  
 A:Status: translated from GB/EMBL/DBJ

A:Molecule type: DNA

A:Residues: 8-240 <RES>  
 A:Cross-references: GB:M1930; NID:g190519; PIDN:AA859443.1; PID:g190520  
 R:Brown, P.; Goldfarb, L.G.; McCombie, W.R.; Nieto, A.; Squillacote, D.; Sheremata, W  
 Neurology 42, 422-427, 1992

A:Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert muta  
 A:Reference number: I58135; MUID:92140671; PMID:1736177  
 A:Accession: I58135  
 A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: DNA  
 A:Residues: 51-91, 'PHGGMGCPHGGMGCPHGGMGCPHGGMGCPHGGMGCPHGGMG' <RES>  
 A:Cross-references: GB:S80539; NID:g244698; PIDN:AA2134.1; PID:g244699  
 R:Goldfarb, L.G.; Brown, P.; McCombie, W.R.; Goldfarb, D.; Swergold, G.D.; Mills, P.R.;  
 Proc. Natl. Acad. Sci. U.S.A. 88, 10926-10930, 1991  
 A:Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven,  
 A:Reference number: I59184; MUID:92073400; PMID:1683708  
 A:Accession: I59184  
 A:Status: translated from GB/EMBL/DBJ  
 A:Molecule type: DNA  
 A:Residues: 60-67 <COL>  
 A:Cross-references: GB:S71208; NID:g239877; PIDN:AA20521.1; PID:g239878; GB:S71210; NID:  
 C:Genetics:  
 A:Gene: GDB:PRNP; CJD; PRIP  
 A:Cross-references: GDB:120720; OMIM:176640; OMIM:137440  
 A:Map position: 20pter-20p12  
 A:Introns: #status absent  
 A>Note: one intron occurs before the initiator codon  
 C:Superfamily: major prion protein  
 C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidyl  
 F:1-22/Domain: signal sequence #status predicted <SIG>  
 F:23-230/Product: major prion protein #status predicted <MAT>  
 F:54-92/Region: 8-residue repeats (P-H-G-G-W-G-Q)  
 F:113-134/Domain: transmembrane #status predicted <TM>  
 F:231-253/Domain: carboxyl-terminal propeptide #status predicted <CTP>  
 F:181,197/Binding site: disulfide bonds: #status predicted  
 F:181,197/Binding site: carbohydrate (Asn) (covalent) #status predicted  
 F:230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match 87.9%; Score 51; DB 1; Length 253;  
 Best Local Similarity 69.2%; Pred. No. 0.0056;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPDXXNQ 13  
 |||||  
 DB 160 QVYRPMDESNQ 172

RESULT 11  
 137032  
 major prion protein precursor - gorilla  
 C:Species: Gorilla gorilla (gorilla)  
 C:Date: 31-May-1996 #sequence\_revision 31-May-1996 #text\_change 13-Aug-1999  
 C:Accession: I37032  
 R:Cervenakova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.;  
 Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994  
 A:Title: Infectious amyloid precursor gene sequences in primates used for experimental  
 A:Reference number: I36907; MUID:95083661; PMID:7991600  
 A:Accession: I37032  
 A:Status: preliminary; translated from GB/EMBL/DBJ  
 A:Molecule type: DNA  
 A:Residues: 1-253 <RES>  
 A:Cross-references: EMBL:U5166; NID:g563208; PIDN:AA68633.1; PID:g563209  
 A:Superfamily: major prion protein

Query Match 87.9%; Score 51; DB 2; Length 253;  
 Best Local Similarity 69.2%; Pred. No. 0.0056;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPDXXNQ 13  
 |||||  
 DB 160 QVYRPMDESNQ 172

RESULT 12  
 184423  
 major prion protein precursor - rhesus macaque  
 C:Species: Macaca mulatta (rhesus macaque)  
 C:Date: 24-May-1996 #sequence\_revision 24-May-1996 #text\_change 13-Aug-1999  
 C:Accession: I84423; S53622; S71054  
 R:Cervenakova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.;  
 Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

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A:Title: infectious amyloid precursor gene sequences in primates used for experimental
A:Reference number: 136907; MUID:95083661; PMID:7991600
A:Accession: I84423
A:Status: preliminary; translated from GR/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 1-253 <RES>
A:Cross-References: EMBL:U015163; NID:9595850; PIDN:AA68635.1; PID:9595851
R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53622
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-210,'R',212-253 <SCH>
A:Cross-References: EMBL:U08307
R:Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71054
A:Molecule type: DNA
A:Residues: 1-253 <SCH>
A:Cross-References: EMBL:U08307; NID:9474372; PIDN:AAC50095.1; PID:9474373
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane

Query Match      87.98; Score 51; DB 2; Length 253;
Best Local Similarity 69.28; Pred. NO. 0.0056;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY      1 QVYXPXDXYNQ 13
      ||||| | | | |
Db      160 QVYRPVDQISNQ 172

RESULT 13
S53618
major prion protein - Colobus guereza
C:Species: Colobus guereza
C:Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 13-Aug-1999
C:Accession: S53618; S71046
R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53618
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-253 <SCH>
A:Cross-References: EMBL:U08297
R:Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71046
A:Molecule type: DNA
A:Residues: 1-210,'E',212-253 <SCH>
A:Cross-References: EMBL:U08297; NID:9474352; PIDN:AAC50086.1; PID:9474353
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane

Query Match      87.98; Score 51; DB 2; Length 253;
Best Local Similarity 69.28; Pred. NO. 0.0056;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY      1 QVYXPXDXYNQ 13
      ||||| | | | |
Db      160 QVYRPVDQISNQ 172

RESULT 14
S53619
major prion protein - Presbytis francoisi
C:Species: Presbytis francoisi

```



C:Date: 28-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 13-Aug-1999  
 C:Accession: S53619; S71057  
 R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 J. Mol. Biol. 245, 362-374, 1995  
 A:Title: Prion protein gene variation among primates.  
 A:Reference number: S53614; MUID:95139066; PMID:7837269  
 A:Accession: S53619  
 A:Status: nucleic acid sequence not shown  
 A:Molecule type: DNA  
 A:Residues: 1-253 <SCH>  
 A:Cross-references: EMBL:U08302  
 R:Schaetzl, H.M.  
 submitted to the EMBL Data Library, April 1994  
 A:Reference number: S71041  
 A:Accession: S71057  
 A:Molecule type: DNA  
 A:Residues: 1-210, 'E', 212-253 <SCW>  
 A:Cross-references: EMBL:U08302; NID:q1396067; PIDN:AAB03105.1; PID:q1396068  
 C:Superfamily: major prion protein  
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane pro

Query Match 87.9%; Score 51; DB 2; Length 253;  
 Best Local Similarity 69.2%; Pred. No. 0.0056;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYXNQ 13  
 ||| | | | |  
 DB 160 QVYRPVDOYSNQ 172

## RESULT 15

S53620

major prion protein - hamadryas baboon

C:Species: Papio hamadryas (hamadryas baboon)

C:Date: 28-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 13-Aug-1999

C:Accession: S53620; S71058

R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53620

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-253 &lt;SCH&gt;

A:Cross-references: EMBL:U08294

R:Schaetzl, H.M.  
 submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71058

A:Molecule type: DNA

A:Residues: 1-210, 'E', 212-253 &lt;SCW&gt;

A:Cross-references: EMBL:U08294; NID:q474346; PIDN:AAC50083.1; PID:q474347

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane pro

Query Match 87.9%; Score 51; DB 2; Length 253;  
 Best Local Similarity 69.2%; Pred. No. 0.0056;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYXNQ 13  
 ||| | | | |  
 DB 160 QVYRPVDOYSNQ 172

Search completed: March 24, 2003, 17:24:14  
 Job time: 17.25 secs

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GenCore version 5.1.4-p5-4578  
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OW protein - protein search, using sw model

Run on: March 24, 2003, 17:17:23 ; Search time 7.85417 seconds

(without alignments)  
68,650 Million cell updates/sec

Title: US-09-508-828b-2

Perfect score: 58

Sequence: 1 QVYXXPDXXNQ 13

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: SwissProt\_40:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	51	87.9	238 1	PRIO_CERAT
2	51	87.9	238 1	PRIO_THEGE
3	51	87.9	239 1	PRIO_AOTTR
4	51	87.9	241 1	PRIO_CALMO
5	51	87.9	241 1	PRIO_CALMO
6	51	87.9	245 1	PRIO_CALMO
7	51	87.9	246 1	PRIO_CERAT
8	51	87.9	246 1	PRIO_CERAT
9	51	87.9	246 1	PRIO_CERAT
10	51	87.9	252 1	PRIO_CERAT
11	51	87.9	252 1	PRIO_CERAT
12	51	87.9	253 1	PRIO_CERAT
13	51	87.9	253 1	PRIO_CERAT
14	51	87.9	253 1	PRIO_CERAT
15	51	87.9	253 1	PRIO_CERAT
16	51	87.9	253 1	PRIO_CERAT
17	51	87.9	253 1	PRIO_CERAT
18	51	87.9	254 1	PRIO_CERAT
19	51	87.9	254 1	PRIO_CERAT
20	51	87.9	255 1	PRIO_CERAT
21	51	87.9	256 1	PRIO_CERAT
22	51	87.9	256 1	PRIO_CERAT
23	51	87.9	256 1	PRIO_CERAT
24	51	87.9	256 1	PRIO_CERAT
25	51	87.9	256 1	PRIO_CERAT
26	51	87.9	257 1	PRIO_CERAT
27	51	87.9	257 1	PRIO_CERAT
28	51	87.9	257 1	PRIO_CERAT
29	51	87.9	257 1	PRIO_CERAT
30	51	87.9	257 1	PRIO_CERAT
31	51	87.9	257 1	PRIO_CERAT
32	51	87.9	257 1	PRIO_CERAT
33	51	87.9	257 1	PRIO_CERAT

34	50	86.2	252 1	PRIO_CALMA	P40247 callithrix
35	50	86.2	254 1	PRIO_CRIGR	060506 cricetus
36	50	86.2	254 1	PRIO_CRIMU	060468 cricetus
37	50	86.2	254 1	PRIO_CRIMU	060468 cricetus
38	50	86.2	254 1	PRIO_CRIMU	060468 cricetus
39	50	86.2	254 1	PRIO_CRIMU	060468 cricetus
40	50	86.2	254 1	PRIO_CRIMU	060468 cricetus
41	50	86.2	254 1	PRIO_CRIMU	060468 cricetus
42	42	79.3	255 1	PRIO_ODOHE	P47852 odocoileus
43	42	79.3	255 1	PRIO_ODOHE	P47852 odocoileus
44	38	65.5	259 1	PRIO_CERAT	046501 canis faml
45	37	63.8	281 1	PRIO_CERAT	P51780 trichosurus
					Q9p85 xylella fas
					P19712 hog cholera

## ALIGNMENTS

RESULT 1	ID	PRIO_CERAT	STANDARD	PRT	238 AA
AC	095145	095200			
DT	01-NOV-1997	(Rel. 35)	Created		
DT	01-NOV-1997	(Rel. 35)	Last sequence update		
DT	15-JUN-2002	(Rel. 41)	Last annotation update		
DE	Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).				
GN	PRNP.				
OS	Cercopithecus aethiops, and				
OS	Macaca sylvanus (Barbary ape).				
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;				
OC	Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;				
OX	NCBI_TaxID=36222, 9546;				
RN	[1]				
RP	SEQUENCE FROM N. A.				
RA	der Kuyil A.C., Dekker J.T., Goudsmit J.;				
RL	Submitted (NOV-1996) to the EMBL/Genbank/DBJ databases.				
CC	-1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE				
CC	HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.				
CC	-1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED				
CC	"NODS".				
CC	-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.				
CC	-1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND				
CC	ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,				
CC	CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME				
CC	(GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),				
CC	TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.				
CC	-1- SIMILARITY: BELONGS TO THE PRION FAMILY.				
CC	This SWISS-PROT entry is copyright. It is produced through a collaboration				
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CC	entities requires a license agreement (See <a href="http://www.isb-sib.ch/announce/">http://www.isb-sib.ch/announce/</a>				
CC	or send an email to <a href="mailto:license@sib-sib.ch">license@sib-sib.ch</a> ).				
CC	-----				
DR	EMBL	U75384	AA050623.1	1	
DR	EMBL	U75382	AA050629.1	1	
DR	HSSP	P04925	IAG2	1	
DR	InterPro	IPR000817	Prion	1	
DR	Pfam	PF00377	Prion	1	
DR	SMART	SM00157	Prp	1	
DR	PROSITE	PS00291	Prion_1	1	
DR	PROSITE	PS00706	Prion_2	1	
KW	Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.				
FT	NON_TER	1			
FT	SIGNAL	<1	15		
FT	CHAIN	16	215		
FT	PROPEP	216	238		
FT	LIPID	215	215		
FT	DISULFID	164	199		
FT	CARBOHYD	166	166		
FT	CARBOHYD	182	182		

BY SIMILARITY.  
MAJOR PRION PROTEIN.  
REMOVED IN MATURE FORM (BY SIMILARITY).  
GPI-ANCHOR (BY SIMILARITY).  
BY SIMILARITY.  
N-LINKED (GLCNAC. . .) (POTENTIAL).  
N-LINKED (GLCNAC. . .) (POTENTIAL).

Accession	Protein Name	Length (aa)	PI	Score	Significance
DR HSSP; P04925; IAG2.					
DR InterPro; IPR000817; PRion.					
DR Pfam; PF00377; prion.1.					
DR SMART; SM00157; PRP; 1.					
DR PROSITE; PS00291; PRION_1; 1.					
DR PROSITE; PS00706; PRION_2; 1.					
KM Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.					
FT NON TER		1	1		
FT SIGNAL		<1	15		
FT CHAIN		16	>238		
FT DISULFID		164	199		
FT CARBOHYD		166	166		
FT CARBOHYD		182	182		
FT DOMAIN		44	83		
FT REPEAT		44	52		
FT REPEAT		53	60		
				1.	
				2.	

DR	EMBL: U08293; AAC50082.1; -.			
DR	HSSP: P04925; IAG2.			
DR	InterPro: IPR000817; Prion.			
DR	Pfam: PF00377; Prion; 1.			
DR	SMART: SM00157; PRP; 1.			
DR	PROSITE: PS00291; PRION_1; 1.			
DR	PROSITE: PS00706; PRION_2; 1.			
KW	Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.			
FT	NON_TER	1	1	
FT	SIGNAL	<1	15	
FT	CHAIN	16	>239	
FT	DISULFID	171	206	
FT	CARBOHYD	173	173	
FT	CARBOHYD	189	189	
FT	DOMAIN	44	83	
FT	REPEAT	44	51	0.
FT	REPEAT	52	59	1.
FT	REPEAT	60	67	2.
FT	REPEAT	68	75	3.
FT	REPEAT			4.

FT REPEAT 76 83 5.  
FT NON\_TER 239  
SQ SEQUENCE 239 AA: 26246 MM: 2EFB77E354B7024A CRC64:

Query Match 87.9%: Score 51: DB 1: Length 239:  
Best Local Similarity 69.2%: Pred. No. 0.002:  
Matches 9: Conservative 0: Mismatches 4: Indels 0: Gaps 0:

OY 1 QVYXPKDXYXNQ 13  
DB 153 QVYRPVDQYSNQ 164

## RESULT 4

PRIO\_CALMO STANDARD: PRT: 241 AA.  
AC P40248:  
DT 01-FEB-1995 (Rel. 31, Created)  
DR 01-FEB-1995 (Rel. 31, Last sequence update)  
DT 01-NOV-1995 (Rel. 32, Last annotation update)  
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).  
GN PRNP.  
OS Callicebus moloch (Dusky tit).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callitrichidae;  
OC Callitrichidae.  
OC NCBI\_TaxID=9523;  
OX RN  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=95139066; PubMed=7837269;  
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;  
RT "Prion protein gene variation among primates."  
RL J. Mol. Biol. 245:362-374(1995).  
CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
CC "RODS".  
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME  
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
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CC  
CC EMBL; U08312; AAC50100.1; -  
CC HSSP; P04925; 1AG2.  
CC InterPro: IPR000817; Prion.  
DR Pfam: PF00377; prion. 1.  
DR SMART: SM00157; PrP. 1.  
DR PROSITE: PS00291; PRION\_1; 1.  
DR PROSITE: PS00706; PRION\_2; 1.  
KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
FT NON\_TER 1 1  
FT SIGNAL <1 15  
FT CHAIN 16 >241  
FT PROPEP 224 >241  
FT LIPID 223  
FT DISULFID 172 207  
FT CARBOHYD 174 174  
FT CARBOHYD 190 190  
FT DOMAIN 44 84  
FT REPEAT 44 52  
FT REPEAT 53 60  
FT REPEAT 61 68  
FT REPEAT 69 76

FT REPEAT 77 84 5.  
FT NON\_TER 241  
SQ SEQUENCE 241 AA: 26373 MM: C6D2013EEFCAEC93 CRC64:

Query Match 87.9%: Score 51: DB 1: Length 241:  
Best Local Similarity 69.2%: Pred. No. 0.002:  
Matches 9: Conservative 0: Mismatches 4: Indels 0: Gaps 0:

OY 1 QVYXPKDXYXNQ 13  
DB 153 QVYRPVDQYSNQ 165

## RESULT 5

PRIO\_MANSP STANDARD: PRT: 241 AA.  
AC P40253:  
DT 01-FEB-1995 (Rel. 31, Created)  
DR 01-FEB-1995 (Rel. 31, Last sequence update)  
DT 01-OCT-1996 (Rel. 34, Last annotation update)  
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).  
GN PRNP.  
OS Mandrillus sphinx (Mandrill) (Papio sphinx).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
OC Cercopithecoidea; Mandrillidae.  
OC NCBI\_TaxID=9561;  
OX RN  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=95139066; PubMed=7837269;  
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;  
RT "Prion protein gene variation among primates."  
RL J. Mol. Biol. 245:362-374(1995).  
CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
CC "RODS".  
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME  
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
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CC  
CC EMBL; U08303; AAC50091.1; -  
CC HSSP; P04925; 1AG2.  
CC InterPro: IPR000817; Prion.  
DR Pfam: PF00377; prion. 1.  
DR SMART: SM00157; PrP. 1.  
DR PROSITE: PS00291; PRION\_1; 1.  
DR PROSITE: PS00706; PRION\_2; 1.  
KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
FT NON\_TER 1 1  
FT SIGNAL <1 15  
FT CHAIN 16 223  
FT PROPEP 224 >241  
FT LIPID 223  
FT DISULFID 172 207  
FT CARBOHYD 174 174  
FT CARBOHYD 190 190  
FT DOMAIN 44 84  
FT REPEAT 44 52  
FT REPEAT 53 60  
FT REPEAT 61 68  
FT REPEAT 69 76

FT REPEAT 61 68 3.  
 FT REPEAT 69 76 4.  
 FT REPEAT 77 84 5.  
 FT NON\_TER 241  
 SQ SEQUENCE 241 AA: 26398 MW: E539D84E2B2B59DE CRC64;

Query Match  
 Best Local Similarity 87.9%; Score 51; DB 1; Length 241;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPDXXXNQ 13  
 DB 153 QVYRPVDOYSNO 165

RESULT 6  
 Prio\_CERAE STANDARD; PRT; 245 AA.

ID Prio\_CERAE STANDARD; PRT; 245 AA.  
 AC P40250;  
 DT 01-FEB-1995 (Rel. 31, Created)  
 DT 01-FEB-1995 (Rel. 31, Last sequence update)  
 DT 16-OCT-2001 (Rel. 40, Last annotation update)  
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).  
 GN PRNP.  
 OS Cercopithecus aethiops (Green monkey) (Grivet), and  
 OS Cercopithecus diana (Diana monkey).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
 OC Cercopithecinae; Cercopithecus.  
 NCBI\_Taxid=9534, 36224;

SEQUENCE FROM N.A.  
 MEDLINE-95139066; Pubmed-7837269;  
 Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;  
 RT J. Mol. Biol. 245:362-374(1995).

-1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
 HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
 -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
 "RODS".

-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
 ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CRETZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME  
 (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

-1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
 -----  
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EMBL: U08291; AAC50080.1;  
 DR EMBL: U08292; AAC50081.1;  
 DR HSSP: P04925; IAG2.

DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; prion; 1.

DR PRINTS: PR00341; PRION.  
 DR SMART: SM00157; PRP; 1.

DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.

KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT SIGNAL 1 22  
 FT NON\_TER 1 22

FT CHAIN 23 222  
 FT PROPEP 223 245  
 FT LIPID 222 222  
 FT DISULFID 222 206  
 FT CARBOHYD 173 173  
 FT CARBOHYD 169 169

N-LINKED (GLCNAC. . .) (POTENTIAL).  
 N-LINKED (GLCNAC. . .) (POTENTIAL).

FT DOMAIN 51 83  
 FT REPEAT 51 59 0.  
 FT REPEAT 60 67 1.  
 FT REPEAT 68 75 2.  
 FT REPEAT 76 83 3.  
 FT REPEAT 83 83 4.  
 SQ SEQUENCE 245 AA: 26885 MW: D582B58E2726C99A CRC64;

Query Match  
 Best Local Similarity 87.9%; Score 51; DB 1; Length 245;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPDXXXNQ 13  
 DB 152 QVYRPVDOYSNO 164

RESULT 7  
 Prio\_CERMO STANDARD; PRT; 246 AA.

ID Prio\_CERMO STANDARD; PRT; 246 AA.  
 AC Q95172; Q95173;  
 DT 01-NOV-1997 (Rel. 35, Created)  
 DT 01-NOV-1997 (Rel. 35, Last sequence update)  
 DT 15-JUL-1998 (Rel. 36, Last annotation update)  
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).  
 GN PRNP.  
 OS Cercopithecus mona, and  
 OS Cercopithecus neglectus.  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
 OC Cercopithecinae; Cercopithecus.  
 NCBI\_Taxid=36226, 36227;

SEQUENCE FROM N.A.  
 der Kuyt A.C., Dekker J.T., Goudsmit J.;  
 RL Submitted (NOV-1996) to the EMBL/Genbank/DBJ databases.

-1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
 HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
 -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
 "RODS".

-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
 ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CRETZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME  
 (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

-1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
 -----  
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EMBL: U75386; AAB50625.1;  
 DR EMBL: U75387; AAB50626.1;  
 DR HSSP: P04925; IAG2.

DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; prion; 1.

DR SMART: SM00157; PRP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.

DR PROSITE: PS00706; PRION\_2; 1.  
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT SIGNAL 1 15  
 FT NON\_TER 1 15

FT CHAIN 16 223  
 FT PROPEP 224 246  
 FT LIPID 223 223  
 FT DISULFID 223 207  
 FT CARBOHYD 174 174  
 FT CARBOHYD 190 190

N-LINKED (GLCNAC. . .) (POTENTIAL).  
 N-LINKED (GLCNAC. . .) (POTENTIAL).

FT DOMAIN 44 84 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-  
 FT REPEAT 44 52 0.  
 FT REPEAT 1. 1.  
 FT REPEAT 53 60 2.  
 FT REPEAT 61 68 3.  
 FT REPEAT 69 76 4.  
 FT REPEAT 77 84 5.  
 SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;  
 Query Match 87.9%; Score 51; DB 1; Length 246;  
 Best Local Similarity 69.2%; Pred. No. 0.0021;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 Oy 1 QVYXXPDXXNQ 13  
 |||||  
 Db 153 QVYRPVDOYSNQ 165

RESULT 8  
 Prio\_CERPA STANDARD; PRT; 246 AA.  
 ID Prio\_CERPA 095174;  
 AC 01-NOV-1997 (Rel. 35, Created)  
 DT 01-NOV-1997 (Rel. 35, Last sequence update)  
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).  
 GN PRNP.  
 OS Cercopithecus patas.  
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
 OC Cercopithecinae; Cercopithecus.  
 OX NCBI\_TaxID=27677;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RA der Kuyt A.C., Dekker J.T., Goudsmit J.;  
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.  
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
 CC "RODS".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
 CC -----  
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 CC -----  
 CC EMBL: U75388; AAB50627.1; -  
 CC HSSP: P04925; IAG2.  
 CC InterPro: IPR000817; Prion.  
 CC Pfam: PF00377; prion.1.  
 CC SMART: SM00157; PRP.1.  
 CC PROSITE: PS00291; PRION.1; 1.  
 CC PROSITE: PS00706; PRION.2; 1.  
 CC Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
 CC NON\_TER 1  
 CC SIGNAL <1 15  
 CC CHAIN 16 223  
 CC PROPEP 224 246  
 CC LIPID 223 223  
 CC DISULFID 172 207  
 CC CARBOHYD 174 174  
 CC CARBOHYD 190 190  
 CC DOMAIN 44 84  
 CC 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-  
 CC

FT REPEAT 44 52 0.  
 FT REPEAT 1. 1.  
 FT REPEAT 53 60 2.  
 FT REPEAT 61 68 3.  
 FT REPEAT 69 76 4.  
 FT REPEAT 77 84 5.  
 SQ SEQUENCE 246 AA; 26886 MW; D35D105B8EC53108 CRC64;  
 Query Match 87.9%; Score 51; DB 1; Length 246;  
 Best Local Similarity 69.2%; Pred. No. 0.0021;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 Oy 1 QVYXXPDXXNQ 13  
 |||||  
 Db 153 QVYRPVDOYSNQ 165

RESULT 9  
 Prio\_CERTO STANDARD; PRT; 246 AA.  
 ID Prio\_CERTO 095176;  
 AC 01-NOV-1997 (Rel. 35, Created)  
 DT 01-NOV-1997 (Rel. 35, Last sequence update)  
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).  
 GN PRNP.  
 OS Cercopithecus torquatus atys (Red-crowned mangabey) (Sooty mangabey).  
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
 OC Cercopithecinae; Cercopithecus.  
 OX NCBI\_TaxID=9531;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RA der Kuyt A.C., Dekker J.T., Goudsmit J.;  
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.  
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
 CC "RODS".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
 CC -----  
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 CC -----  
 CC EMBL: U75385; AAB50628.1; -  
 CC HSSP: P04925; IAG2.  
 CC InterPro: IPR000817; Prion.  
 CC Pfam: PF00377; prion.1.  
 CC SMART: SM00157; PRP.1.  
 CC PROSITE: PS00291; PRION.1; 1.  
 CC PROSITE: PS00706; PRION.2; 1.  
 CC Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
 CC NON\_TER 1  
 CC SIGNAL <1 15  
 CC CHAIN 16 223  
 CC PROPEP 224 246  
 CC LIPID 223 223  
 CC DISULFID 172 207  
 CC CARBOHYD 174 174  
 CC CARBOHYD 190 190  
 CC DOMAIN 44 84  
 CC 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-  
 CC

FT	REPEAT	44	52	1.
FT	REPEAT	53	60	2.
FT	REPEAT	61	68	3.
FT	REPEAT	69	76	4.
FT	REPEAT	77	84	5.
5Q	SEQUENCE	246 AA;	26914 MW;	F58I679CBBBC5AD C7 CRC64;

Query Match	87.98%	Score 51	DB 1	Length 246
Best Local Similarity	69.28%	Pred. No. 0.0021		
Matches 9	Conservative	0	Mismatches 4	Indels 0
				Gaps 0

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Qy 1 QVYXXPXDXYXNQ 13
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Db 153 QVYYRPVDQYSNQ 16
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RESULT 10	ID	PRIOT_CBPAP	STANDARD;	PRT;	252 AA.
AC	P40249;				
DT	01-FEB-1995	(Rel. 31, Created)			
DT	01-FEB-1995	(Rel. 31, Last sequence update)			
DT	01-OCT-1996	(Rel. 34, Last annotation update)			
DE	Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).				
GN	PrP.				
OS	Cebus apella (Brown-capped capuchin).				
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;				
OC	Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Cebinae; Cebus.				
OX	NCBI_Taxid:9515;				
'RN	(1)				
RP	SEQUENCE FROM N.A.				
RX	MEDLINE=95139066; PubMed=7837269;				
RA	Schacht H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;				
RT	"Prion protein gene variation among primates."				
RL	J. Mol. Biol. 245:362-374(1995).				
CC	-1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE				
CC	HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.				
CC	-1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED				
CC	"RODS".				
CC	-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.				
CC	-1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND				
CC	ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,				
CC	CRUZFELD-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME				
CC	(GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),				
CC	TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.				
CC	-1- SIMILARITY: BELONGS TO THE PRION FAMILY.				
CC	-----				
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CC	or send an email to <a href="mailto:license@isb-sib.ch">license@isb-sib.ch</a> ).				
CC	-----				
DR	EMBL; U08295; AAC50084.1; -				
DR	HSSP; P04156; IEIG.				
DR	InterPro; IPR000817; Prion.				
DR	Pfam; PF00377; prion.1.				
DR	PRINTS; PR00341; PRION.				
DR	SMART; SM00157; PRP; 1.				
DR	PROSITE; PS00291; PRION_1; 1.				
DR	PROSITE; PS00706; PRION_2; 1.				
KW	Prion; Brain; Glycoprotein; GPI-anchor; Repeat; signal.				
FT	SIGNAL	1	22		
FT	CHAIN	23	229		
FT	PROPEP	220	252		
FT	LIPID	229	229		
FT	DISULFID	178	213		
FT	CARBOHYD	180	180		
FT	CARBOHYD	196	196		
FT	DOMAIN	51	90		
FT					

FT	REPEAT	51	58	1.
FT <td>REPEAT</td> <td>59</td> <td>66</td> <td>2.</td>	REPEAT	59	66	2.
FT <td>REPEAT</td> <td>67</td> <td>74</td> <td>3.</td>	REPEAT	67	74	3.
FT <td>REPEAT</td> <td>75</td> <td>82</td> <td>4.</td>	REPEAT	75	82	4.
FT <td>REPEAT</td> <td>83</td> <td>90</td> <td>5.</td>	REPEAT	83	90	5.
SO <td>SEQUENCE</td> <td>252 AA;</td> <td>27579 MM;</td> <td>A2DFCA0AD26D7821 CRC64</td>	SEQUENCE	252 AA;	27579 MM;	A2DFCA0AD26D7821 CRC64

Query Match	87.98;	Score 51;	DB 1;	length 252;
Best Local Similarity	69.28;	Pred. No. 0.0021;		
Matches	9;	Conservative	0;	Mismatches 4;
			Indels	0;
			Gaps	0;

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QY      1 QVYXXPDXNNQ 13
          |||||
Db     159 QVYYRPVDQYSN 171
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ID	PRIOR	RABIT	STANDARD	PRT	252 AA.
AC	095211				
DT	01-NOV-1997	(Rel. 35, Last sequence update)			
DT	01-NOV-1997	(Rel. 35, Last sequence update)			
DT	01-NOV-1997	(Rel. 35, Last annotation update)			
DE	Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).				
GN	PrP <sup>Sc</sup> OR PrP.				
OC	Enkephalagus cuniculus (Rabbit).				
OC	Euryarchaea, Metazoa: Chordata: Craniata: Vertebrata: Euteleostomi;				
OC	Mammalia, Eutheria; Lagomorpha; Leporidae; Oryctolagus.				
OK	NCBI_TaxID=9986;				
RN	[1]				
RP	SEQUENCE FROM N.A.				
RC	STRAIN-New Zealand white;				
RX	MEDLINE=97183665; PubMed=9031631;				
RA	Loftus B., Rogers M.;				
RT	"Characterization of a prion protein (PrP) gene from rabbit; a				
RL	species with apparent resistance to infection by prions."				
RT	Gene 184:215-219(1997).				
CC	-1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE				
CC	HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.				
CC	-1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED				
CC	"RODS".				
CC	-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.				
CC	-1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND				
CC	ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,				
CC	CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME				
CC	(GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),				
CC	TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.				
CC	-1- SIMILARITY: BELONGS TO THE PRION FAMILY.				
CC	-----				
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CC	or send an email to <a href="mailto:license@isb-sib.ch">license@isb-sib.ch</a> ).				
CC	-----				
CC	EMBL: U28334; AAC48697.1; -.				
DR	HSSP: P10279; IDWY.				
DR	InterPro: IPR000817; Prion.				
DR	Pfam: PF00377; prion.1.				
DR	PRINTS: PR00341; PRION.				
DR	SMART: SM00157; PRP; 1.				
DR	PROSITE: PS00291; PRION_1; 1.				
DR	PROSITE: PS00706; PRION_2; 1.				
KW	Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.				
FT	SIGNAL	1	28		
FT	CHAIN	29	252		
FT	CARBOHYD	180			
FT	CARBOHYD	196	196		
FT	DISULFID	178	213		
FT	DOMAIN	51	92		
FT					



FT REPEAT 51 59 1.  
 FT REPEAT 60 67 2.  
 FT REPEAT 68 75 3.  
 FT REPEAT 76 83 4.  
 FT REPEAT 84 92 5.  
 SO SEQUENCE 252 AA; 27432 MW; 2E177AAAF38B23A54 CRC64;

Query Match 87.9%; Score 51; DB 1; Length 252;  
 Best Local Similarity 69.2%; Pred. No. 0.0021;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXKXNKG 13  
 DB 159 QVYRPVQYSNQ 171

RESULT 12  
 ID PRIO\_COLGU STANDARD; PRT; 253 AA.  
 AC P40251;  
 DT 01-FEB-1995 (Rel. 31, Created)  
 DT 01-FEB-1995 (Rel. 31, Last sequence update)  
 DT 16-OCT-2001 (Rel. 40, Last annotation update)  
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).  
 GN PRNP.  
 OS Colobus guereza (Black-and-white colobus monkey).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea; Colobinae;  
 OC Colobus.  
 OX NCBI\_TaxID=33548;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RA MEDLINE=95139066; PubMed=7837269;  
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;  
 RT "Prion protein gene variation among primates.";  
 RL J. Mol. Biol. 245:362-374(1995).  
 [2]  
 RP SEQUENCE OF 8-253 FROM N.A.  
 RA der Kuyt A.C., Dekker J.T., Goudsmit J.;  
 RL Submitted (Oct-1996) to the EMBL/GenBank/DBJ databases.  
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
 CC "RODS".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CC CRUZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
 CC -----  
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 CC -----  
 CC EMBL; 008397; AAC50086.1; -  
 CC EMBL; U75389; AAS50624.1; -  
 CC HSSP; P04925; IAG2.  
 CC InterPro: IPR000817; Prion.  
 CC Pfam: PF00377; prion.1.  
 CC PRINTS: PR00341; PRION.  
 CC SMART: SM00157; PRP.1.  
 CC PROSITE: PS00291; PRION\_1; 1.  
 CC PROSITE: PS00706; PRION\_2; 1.  
 CC Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT SIGNAL 1 22  
 FT CHAIN 23 230  
 FT PROPEP 231 253  
 REMOVED IN MATURE FORM (BY SIMILARITY).

FT LIPID 230 230  
 FT DISULFID 179 214  
 FT CARBOHYD 181 181  
 FT CARBOHYD 197 197  
 FT DOMAIN 51 91  
 FT REPEAT 51 59  
 FT REPEAT 60 67  
 FT REPEAT 68 75  
 FT REPEAT 76 83  
 FT REPEAT 84 91  
 SO SEQUENCE 253 AA; 27626 MW; 14B174778B1F5316 CRC64;

Query Match 87.9%; Score 51; DB 1; Length 253;  
 Best Local Similarity 69.2%; Pred. No. 0.0021;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXKXNKG 13  
 DB 160 QVYRPVQYSNQ 172

RESULT 13  
 ID PRIO\_GORGO STANDARD; PRT; 253 AA.  
 AC P40252; Q28419;  
 DT 01-FEB-1995 (Rel. 31, Created)  
 DT 01-FEB-1995 (Rel. 31, Last sequence update)  
 DT 15-JUL-1998 (Rel. 36, Last annotation update)  
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).  
 GN PRNP.  
 OS Gorilla gorilla gorilla (Lowland gorilla).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Gorilla.  
 OX NCBI\_TaxID=9595;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RA MEDLINE=95139066; PubMed=7837269;  
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;  
 RT "Prion protein gene variation among primates.";  
 RL J. Mol. Biol. 245:362-374(1995).  
 [2]  
 RP SEQUENCE FROM N.A.  
 RA TISSUE=Blood;  
 RA MEDLINE=95083661; PubMed=7991600;  
 RA Cervenakova L., Brown P., Goldfarb L.G., Nagle J., Petrone R.,  
 RA Rubenstein R., Dubnick M., Gibbs C.J., Gajdusek D.C.;  
 RT "Infectious amyloid precursor gene sequences in primates used for  
 RT experimental transmission of human spongiform encephalopathy.";  
 RL Proc. Natl. Acad. Sci. U.S.A. 91:12159-12162(1994).  
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
 CC "RODS".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CC CRUZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
 CC -----  
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 CC -----  
 CC EMBL; 008300; AAC50089.1; -  
 CC EMBL; U15166; AAA68633.1; -  
 CC HSSP; P04156; IQL2.

DR InterPro: IPR000817; prion.  
 DR Pfam: PF00377; prion.1.  
 DR PRINTS: PRO0341; PRION.  
 DR SMART: SM00157; PRP.1.  
 DR PROSITE: PS00291; PRION.1; 1.  
 DR PROSITE: PS00706; PRION.2; 1.  
 DR prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT SIGNAL 1 22  
 FT CHAIN 1 23  
 FT PROPEP 231 233  
 FT LIPID 230 230  
 FT DISULFID 179 214  
 FT CARBOHYD 161 181  
 FT CARBOHYD 157 157  
 FT DOMAIN 51 91  
 FT REPEAT 51 59  
 FT REPEAT 60 67  
 FT REPEAT 68 75  
 FT REPEAT 76 83  
 FT REPEAT 84 91  
 FT CONFLICT 6 6  
 FT SEQUENCE 253 AA; 27660 MW; E28F4C3FA8CA49E CRC64;  
 Query Match 87.9%; Score 51; DB 1; Length 253;  
 Best Local Similarity 69.2%; Pred. No. 0.0021;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1 QVYXXPXDXXXN 13  
 Db 160 QVYRPMQYRSM 172  
 RESULT 14  
 ID PRIO\_HUMAN STANDARD; PRT; 253 AA.  
 AC P04156;  
 DT 01-NOV-1986 (Rel. 03, Created)  
 DT 01-NOV-1986 (Rel. 03, Last sequence update)  
 DT 15-JUN-2002 (Rel. 41, Last annotation update)  
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (ASCR)  
 DE (CD230 antigen).  
 DE PRNP.  
 OS Homo sapiens (Human).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.  
 OX NCBI\_TaxID=9606;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=86300093; PubMed=3755672;  
 RA Kretzschmar H.A., Stowring L.E., Westaway D., Stubblefield W.H.,  
 RA Prusiner S.B., Dearmond S.J.;  
 RT "Molecular cloning of a human prion protein cDNA.";  
 RL DNA 5:315-324(1986).  
 RN [2]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=21638749; PubMed=11780052;  
 RA Deloukas P., Matthews L.H., Ashurst J., Burton J., Gilbert J.G.R.,  
 RA Jones M., Stavriles G., Almeida J.P., Babbage A.K., Bagguley C.L.,  
 RA Bailey J., Barlow K.F., Bates K.N., Beard L.M., Beare D.M.,  
 RA Beasley O.P., Bird C.P., Blakey S.E., Bridgeman A.M., Brown A.J.,  
 RA Buck D., Burrill W.D., Butler A.P., Carder C., Carter N.P.,  
 RA Chapman J.C., Clamp M., Collier R.E., Clark L.N., Clark S.Y., Clee C.M.,  
 RA Clegg S., Cobley V.E., Collier R.E., Connor R.E., Corby N.R.,  
 RA Coulson A., Coville G.J., Dearden R., Dhami P.D., Dunn M.,  
 RA Ellington A.G., Frankland J.A., Fraser A., French L., Garner P.,  
 RA Graffham D.V., Griffiths C., Griffiths M.N.D., Gilliam R., Hall R.E.,  
 RA Hammond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J.,  
 RA Huckle E., Hunt A.R., Hunt S.E., Jekosch K., Johnson C.M., Johnson D.,  
 RA Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lawlor S.,  
 RA Leharvala M.H., Leversha M.A., Lloyd C., Lloyd D.M., Lovell J.D.,  
 RA Marsh V.L., Martin S.L., McConachie L.J., McKay K., McMurray A.A.,  
 RA Milne S.A., Mistry D., Moore M.J.F., Mullikin J.C., Nickerson T.,

RA Oliver K., Parker A., Patel R., Pearce T.A.V., Peck A.I.,  
 RA Philimore B.J.C.T., Prathalingam S.R., Plumb R.W., Ramsay H.,  
 RA Rice C.M., Ross M.T., Scott C.E., Sehra H.K., Showkhen R., Sims S.,  
 RA Skuce C.D., Smith M.L., Soderlund C., Stewart C.A., Stilson J.E.,  
 RA Swann R.M., Symamoe N., Taylor R., Tee L., Thomas D.W., Thorpe A.,  
 RA Tracey A., Tromans A.C., Vaudin M., Wall M., Wallis J.M.,  
 RA Whitehead S.L., Whitaker P., Willey D.L., Williams L., Williams S.A.,  
 RA Williams L., Wray P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S.,  
 RA Rogers J.;  
 RT "The DNA sequence and comparative analysis of human chromosome 20.";  
 RL Nature 414:685-871(2001).  
 RN [3]  
 RP SEQUENCE OF 8-253 FROM N.A.  
 RX MEDLINE=86261778; PubMed=3014653;  
 RA Liao Y.-C.J., Lebo R.V., Clawson G.A., Smuckler E.A.;  
 RT "Human prion protein cDNA: molecular cloning, chromosomal mapping,  
 RT and biological implications.";  
 RL Science 233:364-367(1986).  
 RN [4]  
 RP SEQUENCE OF 58-85 AND 111-150 (VARIANT AMYLOID GSS).  
 RX MEDLINE=91160504; PubMed=1672107;  
 RA Tagliavini F., Prelli F., Ghiso J., Bugiani O., Serban D.,  
 RA Prusiner S.B., Farlow M.R., Ghetti B., Frangione B.;  
 RT "Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana  
 RT kindred) is an 11 kd fragment of prion protein with an N-terminal  
 RT glycine at codon 58.";  
 RL EMBO J. 10:513-519(1991).  
 RN [5]  
 RP STRUCTURE BY NMR OF 23-230.  
 RX MEDLINE=20087216; PubMed=10618385;  
 RA Zahn R., Liu A., Luhrs T., Riek R., von Schroetter C.,  
 RA Lopez Garcia F., Billerter M., Calzolari L., Wider G., Wuthrich K.;  
 RT "NMR solution structure of the human prion protein.";  
 RL Proc. Natl. Acad. Sci. U.S.A. 97:145-150(2000).  
 RN [6]  
 RP STRUCTURE BY NMR OF 118-221.  
 RX MEDLINE=20359708; PubMed=10900000;  
 RA Calzolari L., Lysek D.A., Guntert P., von Schroetter C., Riek R.,  
 RA Zahn R., Wuthrich K.;  
 RT "NMR structures of three single-residue variants of the human prion  
 RT protein.";  
 RL Proc. Natl. Acad. Sci. U.S.A. 97:8340-8345(2000).  
 RN [7]  
 RP REVIEW ON VARIANTS.  
 RX MEDLINE=93372867; PubMed=8364585;  
 RA Palmer M.S., Collinge J.;  
 RT "Mutations and polymorphisms in the prion protein gene.";  
 RL Hum. Mutat. 2:168-173(1993).  
 RN [8]  
 RP REVIEW ON VARIANTS.  
 RX MEDLINE=94029646; PubMed=8105771;  
 RA Prusiner S.B.;  
 RT "Genetic and infectious prion diseases.";  
 RL Arch. Neurol. 50:1129-1135(1993).  
 RN [9]  
 RP VARIANT GSS LEU-102.  
 RX MEDLINE=89159432; PubMed=2564168;  
 RA Hsiao K., Baker H.F., Crow T.J., Poulter M., Owen F.,  
 RA Terwilliger J.D., Westaway D., Ott J., Prusiner S.B.;  
 RT "Linkage of a prion protein missense variant to Gerstmann-Strausler  
 RT syndrome.";  
 RL Nature 338:342-345(1989).  
 RN [10]  
 RP VARIANTS LEU-102; VAL-117 AND VAL-129.  
 RX MEDLINE=89392018; PubMed=2783132;  
 RA Don-Ofra K., Tateishi J., Sasaki H., Kitamoto T., Sakaki Y.;  
 RT "Pro->Leu change at position 102 of prion protein is the most  
 RT common but not the sole mutation related to Gerstmann-Strausler  
 RT syndrome.";  
 RL Biochem. Biophys. Res. Commun. 163:974-979(1989).  
 RN [11]  
 RP VARIANT PFI ASN-178.  
 RX MEDLINE=92195483; PubMed=1347910;

RA Medori R., Montagna P., Tritschler H.J., Leblanc A., Cortelli P.,  
 RA Tinuper P., Lugaresi E., Gambetti P.,  
 RA "Fetal familial insomnia: a second kindred with mutation of prion  
 RA protein gene at codon 178.";  
 RA Neurology 42:669-670(1992).  
 RL [12]  
 RA VARIANT CJD ASN-178.  
 RA MEDLINE-91124933; PubMed-1671440;  
 RA Goldfarb L.G., Haltia M., Brown P., Nieto A., Kovanen J.,  
 RA McCombie W.R., Trapp S., Gajdusek D.C.,  
 RA "New mutation in scrapie amyloid precursor gene (at codon 178) in  
 RA Finnish Creutzfeldt-Jakob kindred.";  
 RA Lancet 337:425-425(1991).  
 RL [13]  
 RA VARIANT CJD LYS-200.  
 RA MEDLINE-90355709; PubMed-1975028;  
 RA Goldfarb L., Mitrova E., Brown P., Toh B.K., Gajdusek D.C.,  
 RA "Mutation in codon 200 of scrapie amyloid protein gene in two clusters  
 RA of Creutzfeldt-Jakob disease in Slovakia.";  
 RA Lancet 336:514-515(1990).  
 RL [14]  
 RA VARIANT GSS ARG-217.  
 RA MEDLINE-93350977; PubMed-1363810;  
 RA Hsiao K., Dlouhy S.R., Farlow M.R., Cass C., da Costa M.,  
 RA Conneally P.M., Hodes M.E., Ghetti B., Prusiner S.B.,  
 RA "Mutant prion proteins in Gerstmann-Strausler-Scheinker disease with  
 RA neurofibrillary tangles.";  
 RA Nat. Genet. 1:68-71(1992).  
 RL [15]  
 RA VARIANT CJD ILE-180 AND ARG-232.  
 RA MEDLINE-93233314; PubMed-8461023;  
 RA Kitamoto T., Ohta M., Doh-ura K., Htosh S., Terao Y., Tateishi J.,  
 RA "Novel missense variants of prion protein in Creutzfeldt-Jakob  
 RA disease or Gerstmann-Strausler syndrome.";  
 RA Biochem. Biophys. Res. Commun. 191:709-714(1993).  
 RL [16]  
 RA VARIANT CJD ILE-210.  
 RA MEDLINE-94071412; PubMed-7902693;  
 RA Pocchieri M., Salvatore M., Cutruzzola F., Genuardi M.,  
 RA Alletelli C.T., Masullo C., Macchi G., Alena G., Galgani S., Xi Y.C.,  
 RA Petrolini R., Silvestrini M.C., Brunori M.,  
 RA "A new point mutation of the prion protein gene in Creutzfeldt-Jakob  
 RA disease.";  
 RA Ann. Neurol. 34:802-807(1993).  
 RL [17]  
 RA VARIANT GSS LEU-105.  
 RA MEDLINE-94077414; PubMed-7902972;  
 RA Yamada M., Itoh Y., Fujiyasaki H., Naruse S., Kaneko K., Kitamoto T.,  
 RA Tateishi J., Ohtomo E., Hayakawa M., Tanaka J., Matsushita M.,  
 RA Miyake T.,  
 RA "A missense mutation at codon 105 with codon 129 polymorphism of the  
 RA prion protein gene in a new variant of Gerstmann-Strausler-Scheinker  
 RA disease.";  
 RA Neurology 43:2723-2724(1993).  
 RL [18]  
 RA VARIANT GSS LEU-105.  
 RA MEDLINE-95213742; PubMed-7699395;  
 RA Itoh Y., Yamada M., Hayakawa M., Shozawa T., Tanaka J., Matsushita M.,  
 RA Kitamoto T., Tateishi J., Ohtomo E.,  
 RA "A variant of Gerstmann-Strausler-Scheinker disease carrying codon  
 RA 105 mutation with codon 129 polymorphism of the prion protein gene: a  
 RA clinicopathological study.";  
 RA J. Neurol. Sci. 127:77-86(1994).  
 RL [19]  
 RA VARIANT CJD LYS-200.  
 RA MEDLINE-94142912; PubMed-7906019;  
 RA Inoue I., Kitamoto T., Doh-ura K., Shii H., Goto I., Tateishi J.,  
 RA "Japanese family with Creutzfeldt-Jakob disease with codon 200 point  
 RA mutation of the prion protein gene.";  
 RA Neurology 44:299-301(1994).  
 RL [20]  
 RA VARIANT CJD LYS-200.  
 RA MEDLINE-94316708; PubMed-7913755;

RA Gabizon R., Rosenman H., Weiner Z., Kahana I., Kahana E., Shugart Y.,  
 RA Ott J., Prusiner S.B.,  
 RA "Mutation in codon 200 and polymorphism in codon 129 of the prion  
 RA protein gene in Libyan Jews with Creutzfeldt-Jakob disease.";  
 RA Philos. Trans. R. Soc. Lond., B, Biol. Sci. 343:385-390(1994).  
 RL [21]  
 RA VARIANT GSS LEU-102.  
 RA MEDLINE-95303274; PubMed-7783876;  
 RA Young K., Jones C.K., Piccardo P., Lazzerini A., Golbe L.I.,  
 RA Zimmerman T.R., Dickson D.W., McLachlan D.C., St George-Hyslop P.H.,  
 RA Lemmon A.,  
 RA "Gerstmann-Strausler-Scheinker disease with mutation at codon 102  
 RA and methionine at codon 129 of PRNP in previously unreported  
 RA patients.";  
 RA Neurology 45:1127-1134(1995).  
 RL [22]  
 RA Query Match 87.9%; Score 51; DB 1; Length 253;  
 RA Best Local Similarity 69.2%; Pred. No. 0.0021;  
 RA Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1 QVYXPDXYYXNQ 13  
 Db 160 QVYRPMDESRNQ 172  
 RESULT 15  
 ID PRIO\_MACFA STANDARD; PRT; 253 AA.  
 AC P40254;  
 DT 01-FEB-1995 (Rel. 31, Last sequence update)  
 DT 01-FEB-1995 (Rel. 31, Last sequence update)  
 DT 01-OCT-1996 (Rel. 34, Last annotation update)  
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).  
 GN PRNP.  
 OS Macaca fascicularis (Crab eating macaque) (Cynomolgus monkey),  
 OS Macaca arctoides (Stump-tailed macaque),  
 OS Macaca fuscata fuscata (Japanese macaque),  
 OS Macaca mulatta (Rhesus macaque),  
 OS Macaca nemestrina (Pig-tailed macaque), and  
 OS Papio hamadryas (Hamadryas baboon).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
 OC Cercopithecoinae; Macaca.  
 OC NCBI\_TaxID=9541, 9540, 9543, 9544, 9545, 9557;  
 ON [1]  
 RN SEQUENCE FROM N.A.  
 RP MEDLINE-95139066; PubMed-7837269;  
 RX Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.,  
 RA "Prion protein gene variation among primates.";  
 RL J. Mol. Biol. 245:362-374(1995).  
 RL [2]  
 RN SEQUENCE FROM N.A.  
 RP SPECIES-M.mulatta; TISSUE-Brain;  
 RC MEDLINE-95083661; PubMed-7991600;  
 RX Cervenakova L., Brown P., Goldfarb L.G., Nagle J., Petrone K.,  
 RA Rubenstein R., Dubnick M., Gibbs C.J., Gajdusek D.C.,  
 RA "Infectious amyloid precursor gene sequences in primates used for  
 RA experimental transmission of human spongiform encephalopathy.";  
 RL Proc. Natl. Acad. Sci. U.S.A. 91:12159-12162(1994).  
 RL [3]  
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
 CC "RODS".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES Kuru,  
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
 CC  
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DR EMBL; 008398; AAC50087.1; -  
DR EMBL; 008311; AAC50099.1; -  
DR EMBL; 008301; AAC50090.1; -  
DR EMBL; 008307; AAC50095.1; -  
DR EMBL; 008306; AAC50094.1; -  
DR EMBL; 008294; AAC50083.1; -  
DR EMBL; 015163; AAC68635.1; -  
DR HSSP; P04925; 1AC2.  
DR InterPro; IPR000817; Prion.  
DR Pfam; PF00377; Prion; 1.  
DR PRINTS; PR00341; PRION.  
DR SMART; SM00157; PRP; 1.  
DR PROSITE; PS00291; PRION\_1; 1.  
DR PROSITE; PS00706; PRION\_2; 1.  
KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
FT SIGNAL; 1 22  
FT CHAIN; 23 230  
FT PROPEP; 231 253  
FT LIPID; 230 230  
FT DISULFID; 179 214  
FT CARBOHYD; 181 181  
FT CARBOHYD; 197 197  
FT DOMAIN; 51 91  
FT REPEAT; 51 59  
FT REPEAT; 60 67  
FT REPEAT; 68 75  
FT REPEAT; 76 83  
FT REPEAT; 84 91  
FT REPEAT; 91 91  
SQ SEQUENCE 253 AA; 27676 MW; F01D5EA64AB68C31 CRC64;  
O.  
1.  
2.  
3.  
4.  
5.  
5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-

Query Match 87.9%; Score 51; DB 1; Length 253;  
Best Local Similarity 69.2%; Pred. No. 0.0021;

Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYVXPDXYXNQ 13  
|||||  
DB 160 QVYVPPVDQYSNQ 172

Search completed: March 24, 2003, 17:20:17  
Job time : 7.85417 secs

GenCore version 5.1.4-p5-4578  
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OM protein - protein search, using sw model

Run on: March 24, 2003, 17:19:46 ; Search time 28.4375 Seconds  
(without alignments)  
94.193 Million cell updates/sec

Title: US-09-508-828b-2  
Perfect score: 58  
Sequence: 1 QVYKFXDXNNQ 13

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 671580 seqs, 206047115 residues

Total number of hits satisfying chosen parameters: 671580

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database :

1: SP\_ARCHAEA:\*  
2: SP\_BACTERIA:\*  
3: SP\_FUNGI:\*  
4: SP\_HUMAN:\*  
5: SP\_INVERTEBRATE:\*  
6: SP\_MAMMAL:\*  
7: SP\_MHC:\*  
8: SP\_ORGANELLE:\*  
9: SP\_PHAGE:\*  
10: SP\_PLANT:\*  
11: SP RODENT:\*  
12: SP\_VIRUS:\*  
13: SP\_VERTEBRATE:\*  
14: SP\_UNCLASSIFIED:\*  
15: SP\_VIRUS:\*  
16: SP\_BACTERIAP:\*  
17: SP\_ARCHAEP:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	51	87.9	124	6	Q9TU20
2	51	87.9	181	6	Q97911
3	51	87.9	195	6	Q97903
4	51	87.9	195	6	Q97693
5	51	87.9	200	6	Q97912
6	51	87.9	202	6	Q97908
7	51	87.9	209	6	Q97696
8	51	87.9	202	6	Q97902
9	51	87.9	211	6	Q97787
10	51	87.9	213	6	Q97904
11	51	87.9	214	6	Q97903
12	51	87.9	215	6	Q97904
13	51	87.9	216	6	Q97900
14	51	87.9	223	6	Q97910
15	51	87.9	226	6	Q97907
16	51	87.9	227	6	Q97909

17	51	87.9	233	4	P78446	P78446 homo sapien
18	51	87.9	235	6	Q97695	Q97695 giraffa cam
19	51	87.9	245	4	Q15216	Q15216 homo sapien
20	51	87.9	253	4	Q9UP19	Q9UP19 homo sapien
21	51	87.9	253	4	Q96E70	Q96E70 homo sapien
22	51	87.9	253	4	Q8RBC0	Q8RBC0 homo sapien
23	51	87.9	253	11	Q9Z0T5	Q9Z0T5 meriones un
24	51	87.9	254	6	Q9TSF8	Q9TSF8 oryctolagus
25	51	87.9	254	11	Q9QX79	Q9QX79 mus musculu
26	51	87.9	254	11	Q8VHV6	Q8VHV6 apodemus sy
27	51	87.9	256	6	Q9TU01	Q9TU01 capra hircu
28	51	87.9	256	6	Q9TU07	Q9TU07 capra hircu
29	51	87.9	256	6	Q9TU05	Q9TU05 ovis aries
30	51	87.9	256	6	Q9TU05	Q9TU05 ovis aries
31	51	87.9	256	6	Q95N12	Q95N12 ovis aries
32	51	87.9	256	6	Q95M08	Q95M08 budorcas ta
33	51	87.9	256	6	Q46648	Q46648 capra hircu
34	51	87.9	256	6	Q8SPV7	Q8SPV7 capra hircu
35	51	87.9	256	6	Q8SPV6	Q8SPV6 capra hircu
36	51	87.9	256	6	Q8SPV5	Q8SPV5 capra hircu
37	51	87.9	257	6	Q8SPV4	Q8SPV4 capra hircu
38	51	87.9	257	6	Q9WZU6	Q9WZU6 canis faml
39	51	87.9	285	4	Q75942	Q75942 homo sapien
40	50	86.2	141	6	Q97905	Q97905 turlops tr
41	50	86.2	185	6	Q97694	Q97694 cervus nipp
42	50	86.2	204	6	Q97629	Q97629 odocoileus
43	50	86.2	204	6	Q9TSI8	Q9TSI8 odocoileus
44	50	86.2	204	6	Q9TSI7	Q9TSI7 odocoileus
45	50	86.2	212	6	Q97698	Q97698 cervus elap

## ALIGNMENTS

RESULT 1  
ID Q9TU20 PRELIMINARY: PRT: 124 AA.  
AC Q9TU20:  
DT 01-MAY-2000 (TREMBLrel. 13, Created)  
DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)  
DR 01-DEC-2001 (TREMBLrel. 19, Last annotation update)  
DE Prion protein (Fragment).  
GN PRP.  
OS Varecia variegata variegata.  
OC Eukaryota; Metazoa; Chordata; Cranialata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Strepsirrhini; Lemnidae; Varecia.  
OX NCBI\_TaxID=87289;  
[1]  
RP SEQUENCE FROM N.A.  
RA Gluch S., Schatzl H.M.;  
RT "Unusual prion protein octarepeat structure of the highly BSE-  
susceptible lemur monkey."  
RL Submitted (AUG-1999) to the EMBL/Genbank/DDbJ databases.  
DR EMBL: AF177293; AAD54335.1;  
DR HSSP: P04925; IAG2.  
DR InterPro: IPR000817; Prion.  
DR Pfam: PF00377; Prion.1.  
DR PRINTS: PR00341; PRION.  
DR SMART: SM00157; PRP.1.  
DR PROSITE: PS00291; PRION\_1; 1.  
FT NON\_TER 1  
FT NON\_TER 124  
SQ SEQUENCE 124 AA; 13436 MM; CC2C8A5A855A7C94 CRC64;  
Query Match 87.9%; Score 51; DB 6; Length 124;  
Best Local Similarity 69.2%; Pred No. 0.006;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
OY 1 QVYKFXDXNNQ 13  
Db 93 QVYKFXDXNNQ 105

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RESULT 2
097911 PRELIMINARY; PRT; 181 AA.
AC 097911;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Budorcas taxicolor (taklin).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Caprinae; Budorcas.
OX NCBI_TaxID=37181;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=PBL;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Glich S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
RT of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1176(1999).
DR EMBL: AF117326; AAD19997.1; -.
DR HSSP: P10279; IDWY.
DR InterPro: IPR002395; Kininogen.
DR Pfam: PF00377; Prion.1.
DR PRINTS: PR00334; KININOGEN.
DR PROSITE: PS00341; PRION.
DR SMART: SM00157; PRP.1.
DR PROSITE: PS00291; PRION_1; 1.
FT NON_TER 1
FT NON_TER 181
SQ SEQUENCE 181 AA; 19253 MW; A9001D086442E92A CRC64;

Query Match 87.9%; Score 51; DB 6; Length 181;
Best Local Similarity 69.2%; Pred. No. 0.0089;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 QVYXXPDXYXNQ 13
Db 136 QVYRPPVQXSNQ 148

RESULT 3
097903 PRELIMINARY; PRT; 195 AA.
AC 097903;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Addax nasomaculatus.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Hippotrigonae; Addax.
OX NCBI_TaxID=59515;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=PBL;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Glich S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
RT of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1176(1999).
DR EMBL: AF117309; AAD19980.1; -.
DR HSSP: P10279; IDWY.
DR InterPro: IPR002395; Kininogen.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP.1.
DR PROSITE: PS00706; PRION_2; 1.
FT NON_TER 1
FT NON_TER 195
SQ SEQUENCE 195 AA; 21097 MW; 9D1BE4E99A5D031 CRC64;

Query Match 87.9%; Score 51; DB 6; Length 195;
Best Local Similarity 69.2%; Pred. No. 0.0096;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 QVYXXPDXYXNQ 13
Db 123 QVYRPPVQXSNQ 135

RESULT 4
097693 PRELIMINARY; PRT; 195 AA.
AC 097693;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Canis lupus (Gray wolf).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OX NCBI_TaxID=9612;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=PBL;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Glich S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
RT of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1176(1999).
DR EMBL: AF113939; AAD12063.1; -.
DR HSSP: P04925; IAG2.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion.1.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP.1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
FT NON_TER 1
FT NON_TER 195
SQ SEQUENCE 195 AA; 21097 MW; 9D1BE4E99A5D031 CRC64;

Query Match 87.9%; Score 51; DB 6; Length 195;
Best Local Similarity 69.2%; Pred. No. 0.0096;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 QVYXXPDXYXNQ 13
Db 123 QVYRPPVQXSNQ 135

RESULT 5
097912 PRELIMINARY; PRT; 200 AA.
AC 097912;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Bison bonasus (European bison).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Bovinae; Bison.

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DR PRINTS: PR00334; KININOGEN.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP.1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
FT NON_TER 1
FT NON_TER 195
SQ SEQUENCE 195 AA; 21321 MW; 6A9BA6A7E1AFC9A9 CRC64;

Query Match 87.9%; Score 51; DB 6; Length 195;
Best Local Similarity 69.2%; Pred. No. 0.0096;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 QVYXXPDXYXNQ 13
Db 127 QVYRPPVQXSNQ 139

RESULT 4
097693 PRELIMINARY; PRT; 195 AA.
AC 097693;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Canis lupus (Gray wolf).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OX NCBI_TaxID=9612;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=PBL;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Glich S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
RT of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1176(1999).
DR EMBL: AF113939; AAD12063.1; -.
DR HSSP: P04925; IAG2.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion.1.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP.1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
FT NON_TER 1
FT NON_TER 195
SQ SEQUENCE 195 AA; 21097 MW; 9D1BE4E99A5D031 CRC64;

Query Match 87.9%; Score 51; DB 6; Length 195;
Best Local Similarity 69.2%; Pred. No. 0.0096;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 QVYXXPDXYXNQ 13
Db 123 QVYRPPVQXSNQ 135

RESULT 5
097912 PRELIMINARY; PRT; 200 AA.
AC 097912;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Bison bonasus (European bison).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Bovinae; Bison.

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OX NCBI\_Taxid=9902;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=PBL  
 RX MEDLINE=99303687; PubMed=10373359;  
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
 of flexible regions of the prion protein.";  
 RL J. Mol. Biol. 289:1163-1178(1999).  
 DR EMBL: AF117328; AAD1999.1; -.  
 DR HSSP: P10279; IDWY.  
 DR InterPro: IPR002395; Kininogen.  
 DR InterPro: IPR001610; PAC.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion; 1.  
 DR PRINTS: PRO0334; KININOGEN.  
 DR PRINTS: PRO0341; PRION.  
 DR SMART: SM00086; PAC; 1.  
 DR SMART: SM00157; PRP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 FT NON\_TER 1 1  
 FT NON\_TER 200 200  
 SQ SEQUENCE 200 AA; 21674 MW; 1F70CDF4BE5271B CRC64;  
 OY 1 QVYXXPYDXYYXNQ 13  
 DB 128 QVYXRPVQYSNQ 140  
 RESULT 6  
 O97908 PRELIMINARY; PRT; 202 AA.  
 AC O97908;  
 DT 01-MAY-1999 (TREMblrel. 10, Created)  
 DT 01-MAY-1999 (TREMblrel. 10, Last sequence update)  
 DT 01-JUN-2002 (TREMblrel. 21, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Capra nubiana (Nubian ibex).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
 OC Bovidae; Caprinae; Capra.  
 NC NCBL\_Taxid=72343;  
 OX [1]  
 RN SEQUENCE FROM N.A.  
 RP TISSUE=PBL;  
 RX MEDLINE=99303687; PubMed=10373359;  
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
 of flexible regions of the prion protein.";  
 RL J. Mol. Biol. 289:1163-1178(1999).  
 DR EMBL: AF117319; AAD1999.1; -.  
 DR HSSP: P10279; IDWY.  
 DR InterPro: IPR002395; Kininogen.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion; 1.  
 DR PRINTS: PRO0334; KININOGEN.  
 DR PRINTS: PRO0341; PRION.  
 DR SMART: SM00157; PRP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 FT NON\_TER 1 1  
 FT NON\_TER 202 202  
 SQ SEQUENCE 202 AA; 21949 MW; DB0634A43B4DB77F CRC64;  
 Query Match 87.9%; Score 51; DB 6; Length 200;  
 Best Local Similarity 69.2%; Pred. No. 0.0098;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Best Local Similarity 69.2%; Pred. No. 0.0099;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 OY 1 QVYXXPYDXYYXNQ 13  
 DB 135 QVYXRPVQYSNQ 147  
 RESULT 7  
 O97696 PRELIMINARY; PRT; 202 AA.  
 AC O97696;  
 DT 01-MAY-1999 (TREMblrel. 10, Created)  
 DT 01-MAY-1999 (TREMblrel. 10, Last sequence update)  
 DT 01-JUN-2002 (TREMblrel. 21, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Lama glama (Llama).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Tylopoda; Camelidae; Lama.  
 NC NCBL\_Taxid=9844;  
 OX [1]  
 RN SEQUENCE FROM N.A.  
 RP MEDLINE=99303687; PubMed=10373359;  
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
 of flexible regions of the prion protein.";  
 RL J. Mol. Biol. 289:1163-1178(1999).  
 DR EMBL: AF113943; AAD13291.1; -.  
 DR HSSP: P10279; IDWY.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion; 1.  
 DR PRINTS: PRO0341; PRION.  
 DR SMART: SM00157; PRP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 FT NON\_TER 1 1  
 FT NON\_TER 202 202  
 SQ SEQUENCE 202 AA; 21860 MW; FC4532DB73F354 CRC64;  
 OY 1 QVYXXPYDXYYXNQ 13  
 DB 123 QVYXRPVQYSNQ 135  
 RESULT 8  
 O97V02 PRELIMINARY; PRT; 209 AA.  
 AC O97V02;  
 DT 01-MAY-2000 (TREMblrel. 13, Created)  
 DT 01-MAY-2000 (TREMblrel. 13, Last sequence update)  
 DT 01-JUN-2002 (TREMblrel. 21, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Camelus dromedarius (Dromedary) (Arabian camel).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Tylopoda; Camelidae; Camelus.  
 NC NCBL\_Taxid=9838;  
 OX [1]  
 RN SEQUENCE FROM N.A.  
 RP MEDLINE=99303687; PubMed=10373359;  
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
 of flexible regions of the prion protein.";  
 RL J. Mol. Biol. 289:1163-1178(1999).  
 DR EMBL: AF113940; AAD13288.1; -.  
 DR HSSP: P10279; IDWY.  
 Query Match 87.9%; Score 51; DB 6; Length 202;  
 Best Local Similarity 69.2%; Pred. No. 0.0099;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

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OC Mammalia: Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OC NCBI_TaxID=9615;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=93303687; PubMed=10373359;
RA Wopfinger F., Weldenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
RT of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1178(1999).
DR EMBL: AF113937; AADI2061.1; -.
DR HSSP: P04925; IAG2.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion. 1.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
FT NON_TER 1
FT VARIANT 1
FT NON_TER 60
FT NON_TER 214
SQ SEQUENCE 214 AA; 23167 MW; 551B7669ABD4C6DF CRC64;

Query Match
Best Local Similarity 87.9%; Score 51; DB 6; Length 213;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPXDXYYXNQ 13
DB 123 QVYIRPVDDQYSNQ 135

RESULT 11
OQ9TV03 PRELIMINARY; PRT; 214 AA.
AC OQ9TV03;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
DE Prion protein (Fragment).
GN GN
OS Canis familiaris (Dog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OX NCBI_TaxID=9615;
RN [1]
RP SEQUENCE FROM N.A.
RX STRAIN-BRED DACHSHUND;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weldenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
RT of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1178(1999).
DR EMBL: AF113938; AADI2062.1; -.
DR HSSP: P04925; IAG2.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion. 1.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
FT NON_TER 1
FT VARIANT 1
FT NON_TER 60
FT NON_TER 214
SQ SEQUENCE 214 AA; 23167 MW; 551B7669ABD4C6DF CRC64;

Query Match
Best Local Similarity 87.9%; Score 51; DB 6; Length 214;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPXDXYYXNQ 13
DB 123 QVYIRPVDDQYSNQ 135

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## RESULT 12

ID 097904 PRELIMINARY: PRT: 215 AA.

AC 097904; 01-MAY-1999 (TREMBlrel. 10, Created)  
 DT 01-MAY-1999 (TREMBlrel. 10, Last sequence update)  
 DT 01-JUN-2002 (TREMBlrel. 21, Last annotation update)  
 DE Prion protein (Fragment).

OS Bos javanicus (Wild banteng).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
 CC Bovidae; Bovinae; Bos.  
 CC NCBI\_TaxID=9906;  
 OX [1]  
 RN SEQUENCE FROM N.A.

RP TISSUE=PBL;  
 RC MEDLINE=99303687; PubMed=10373359;  
 RX Wopfler F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RA Schwarz T.F., Werner T., Schatzl H.M.;  
 RT \*Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
 of flexible regions of the prion protein.\*;  
 RL J. Mol. Biol. 289:1163-1178(1999).

DR HSSP: P10279; IDWY.  
 DR InterPro: IPR001610; PAC.  
 DR InterPro: IPR002395; Kininogen.  
 DR InterPro: IPR001610; PAC.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion. 1.  
 DR PRINTS: PR00334; KININOGEN.  
 DR PRINTS: PR00341; PRION.  
 DR SMART: SM00086; PAC; 1.  
 DR SMART: SM00157; PRP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 FT NON\_TER 1  
 FT SEQUENCE 215 AA; 23182 MW; 97A36721B1E73AE6 CRC64;

Query Match 87.9%; Score 51; DB 6; Length 215;  
 Best Local Similarity 69.2%; Pred. No. 0.011;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPXDXYXNQ 13

DB 136 QVYRPVDQYSNQ 148

## RESULT 13

ID 097900 PRELIMINARY: PRT: 216 AA.

AC 097900; 01-MAY-2000 (TREMBlrel. 13, Created)  
 DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)  
 DT 01-JUN-2002 (TREMBlrel. 21, Last annotation update)  
 DE Prion protein (Fragment).

OS Bos taurus (Bovine).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
 CC Bovidae; Bovinae; Bos.  
 CC NCBI\_TaxID=9913;  
 OX [1]  
 RN SEQUENCE FROM N.A.

RP TISSUE=PBL;  
 RC MEDLINE=99303687; PubMed=10373359;  
 RX Wopfler F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RA Schwarz T.F., Werner T., Schatzl H.M.;  
 RT \*Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
 of flexible regions of the prion protein.\*;  
 RL J. Mol. Biol. 289:1163-1178(1999).

DR EMBL: AF117327; AADI9998.1; -

DR HSSP: P10279; IDWY.

DR InterPro: IPR001610; PAC.

DR InterPro: IPR000817; Prion.

DR Pfam: PF00377; Prion. 1.

DR PRINTS: PR00341; PRION.

DR SMART: SM00086; PAC; 1.

DR SMART: SM00157; PRP; 1.

DR PROSITE: PS00291; PRION\_1; 1.

DR PROSITE: PS00706; PRION\_2; 1.

FT NON\_TER 1

FT SEQUENCE 216 AA; 23425 MW; BE6BECE479966730 CRC64;

Query Match 87.9%; Score 51; DB 6; Length 216;  
 Best Local Similarity 69.2%; Pred. No. 0.011;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPXDXYXNQ 13

DB 131 QVYRPVDQYSNQ 143

## RESULT 14

ID 097910 PRELIMINARY: PRT: 223 AA.

AC 097910; 01-MAY-1999 (TREMBlrel. 10, Created)  
 DT 01-MAY-1999 (TREMBlrel. 10, Last sequence update)  
 DT 01-JUN-2002 (TREMBlrel. 21, Last annotation update)  
 DE Prion protein (Fragment).

OS Hippotragus niger (Sable antelope).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
 CC Bovidae; Hippotraginae; Hippotragus.  
 CC NCBI\_TaxID=37189;  
 OX [1]  
 RN SEQUENCE FROM N.A.

RP TISSUE=PBL;  
 RC MEDLINE=99303687; PubMed=10373359;  
 RX Wopfler F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RA Schwarz T.F., Werner T., Schatzl H.M.;  
 RT \*Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
 of flexible regions of the prion protein.\*;  
 RL J. Mol. Biol. 289:1163-1178(1999).

DR HSSP: P10279; IDWY.  
 DR InterPro: IPR002395; Kininogen.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion. 1.  
 DR PRINTS: PR00334; KININOGEN.  
 DR PRINTS: PR00341; PRION.  
 DR SMART: SM00157; PRP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 FT NON\_TER 1  
 FT SEQUENCE 223 AA; 24172 MW; 77A95AC13080F416 CRC64;

Query Match 87.9%; Score 51; DB 6; Length 223;  
 Best Local Similarity 69.2%; Pred. No. 0.011;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPXDXYXNQ 13

DB 136 QVYRPVDQYSNQ 148

## RESULT 15

ID 097907 PRELIMINARY: PRT: 226 AA.

AC 097907;

DT 01-MAY-1999 (TREMBLrel. 10, Created)  
 DT 01-MAY-1999 (TREMBLrel. 10, last sequence update)  
 DT 01-JUN-2002 (TREMBLrel. 21, last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Gazella subgutturosa (Giltred gazelle).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
 OC Bovidae; Antilopinae; Gazella.  
 CX NCBI\_TaxID:59529;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=PBL;  
 RX MEDLINE:99303687; PubMed:10373359;  
 RA Mofner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RA Schwarz T.F., Werner T., Schatzl H.M.;  
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
 RT of flexible regions of the prion protein.";  
 RL J. Mol. Biol. 289:1163-1178(1999).  
 DR EMBL: AF117313; AAD19984.1; ..  
 DR HSSP: P10279; IDWY.  
 DR InterPro: IPR002395; Kininogen.  
 DR InterPro: IPR00817; Prion.  
 DR Pfam: PF00377; Prion; 1.  
 DR PRINTS; PR00341; KININOGEN.  
 DR PRINTS; PR00341; PRION.  
 DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 FT NON\_TER 1 1  
 FT VARIANT 209 209 R -> K.  
 FT NON\_TER 226 226  
 SQ SEQUENCE 226 AA; 24384 MW; D845E27B219ABD2F CRC64;  
 Query Match 87.98; Score 51; DB 6; Length 226;  
 Best Local Similarity 69.28; Pred. NO. 0.011;  
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1 QVYYPXDXYNQ 13  
 DB 141 QVYYPVDDYSNQ 153

Search completed: March 24, 2003, 17:22:11  
 Job time : 28.4375 secs

GenCore version 5.1.4.p5.4578  
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## OM protein - protein search, using sw model

Run on: March 24, 2003, 17:20:26 ; Search time 12.4583 Seconds

(30.702 Million cell updates/sec)

Title: US-09-508-828B-2

Sequence: 1 QVYRPPDXKXNQ 13

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0  
Maximum DB seq length: 200000000Post-processing: Minimum Match 08  
Maximum Match 1008

Listing first 45 summaries

Database : Issued Patents AA:\*  
1: /cgn2\_6/prodata/2/1aa/5A\_COMB.pep:\*  
2: /cgn2\_6/prodata/2/1aa/5B\_COMB.pep:\*  
3: /cgn2\_6/prodata/2/1aa/5A\_COMB.pep:\*  
4: /cgn2\_6/prodata/2/1aa/5B\_COMB.pep:\*  
5: /cgn2\_6/prodata/2/1aa/PCTUS\_COMB.pep:\*  
6: /cgn2\_6/prodata/2/1aa/Backfile1.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	51	87.9	27	1	US-08-244-701B-44
2	51	87.9	27	1	US-08-244-701B-45
3	51	87.9	27	4	US-09-076-721-44
4	51	87.9	27	4	US-09-076-721-45
5	51	87.9	28	1	US-08-244-701B-16
6	51	87.9	28	1	US-08-244-701B-17
7	51	87.9	28	1	US-08-244-701B-18
8	51	87.9	28	4	US-09-076-721-16
9	51	87.9	28	4	US-09-076-721-17
10	51	87.9	28	4	US-09-076-721-18
11	51	87.9	31	1	US-08-244-701B-13
12	51	87.9	31	1	US-08-244-701B-14
13	51	87.9	31	1	US-08-244-701B-15
14	51	87.9	31	4	US-09-076-721-13
15	51	87.9	31	4	US-09-076-721-14
16	51	87.9	31	4	US-09-076-721-15
17	51	87.9	142	1	US-08-556-823-10
18	51	87.9	253	1	US-08-242-188-2
19	51	87.9	253	1	US-08-509-261A-2
20	51	87.9	253	1	US-08-660-626-8
21	51	87.9	253	1	US-08-692-892-2
22	51	87.9	253	2	US-08-713-939A-2
23	51	87.9	253	2	US-08-868-162A-22
24	51	87.9	253	4	US-09-031-168-8
25	51	87.9	253	4	US-09-128-450-20
26	51	87.9	253	4	US-09-036-579-2
27	51	87.9	253	4	US-09-823-494-20

28	51	87.9	253	4	US-09-550-374-2	Sequence 2, Appl
29	51	87.9	254	1	US-08-242-188-1	Sequence 1, Appl
30	51	87.9	254	1	US-08-509-261A-1	Sequence 1, Appl
31	51	87.9	254	1	US-08-660-626-7	Sequence 7, Appl
32	51	87.9	254	1	US-08-692-892-1	Sequence 1, Appl
33	51	87.9	254	2	US-08-713-939A-1	Sequence 1, Appl
34	51	87.9	254	2	US-08-868-162A-21	Sequence 21, Appl
35	51	87.9	254	4	US-09-031-168-7	Sequence 7, Appl
36	51	87.9	254	4	US-09-128-450-19	Sequence 19, Appl
37	51	87.9	254	4	US-09-128-450-28	Sequence 28, Appl
38	51	87.9	254	4	US-09-036-579-1	Sequence 1, Appl
39	51	87.9	254	4	US-09-823-494-19	Sequence 19, Appl
40	51	87.9	254	4	US-09-823-494-28	Sequence 28, Appl
41	51	87.9	254	4	US-09-550-374-1	Sequence 1, Appl
42	51	87.9	255	1	US-08-242-188-4	Sequence 4, Appl
43	51	87.9	255	1	US-08-509-261A-4	Sequence 4, Appl
44	51	87.9	255	1	US-08-660-626-10	Sequence 10, Appl
45	51	87.9	255	1	US-08-692-892-4	Sequence 4, Appl

## ALIGNMENTS

RESULT 1  
US-08-244-701B-44  
; Sequence 44, Application US/08244701B  
; Patent No. 5773572  
; GENERAL INFORMATION:  
; APPLICANT: Fishleigh, Robert V.  
; APPLICANT: Robson, Barry  
; APPLICANT: Wee, Roger P.  
; TITLE OF INVENTION: Fragments of Prion Proteins  
; NUMBER OF SEQUENCES: 67  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Penline & Ramonds  
; STREET: 1155 Avenue of the Americas  
; CITY: New York  
; STATE: New York  
; COUNTRY: U.S.A.  
; ZIP: 10036  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/244,701B  
; FILING DATE: 02-JUN-1994  
; CLASSIFICATION: 436  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Panucci, Allan A.  
; REGISTRATION NUMBER: 30,256  
; REFERENCE/DOCKET NUMBER: 8080-007  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (212) 790-9090  
; TELEFAX: (212) 869-8864/9741  
; INFORMATION FOR SEQ ID NO: 44:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 27 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; US-08-244-701B-44

Query Match 87.9%; Score 51; DB 1; Length 27;  
Best Local Similarity 69.2%; Pred. No. 0.0016;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYRPPDXKXNQ 13  
DB 8 QVYRPPDXKXNQ 20

RESULT 2  
US-08-244-701B-45  
Sequence 45, Application US/08244701B  
Patent No. 5773572  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/244,701B  
FILING DATE: 02-JUN-1994  
CLASSIFICATION: 436  
ATTORNEY/AGENT INFORMATION:  
NAME: Panucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 45:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 27 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-244-701B-45

Query Match 87.9%; Score 51; DB 1; Length 27;  
Best Local Similarity 69.2%; Pred. No. 0.0016;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPDXXXNQ 13  
||| | | | |  
Db 8 QVYRPVDQYSNQ 20

RESULT 3  
US-09-076-721-44  
Sequence 44, Application US/09076721  
Patent No. 6379905  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/076,721  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/244,701  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Panucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 44:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 27 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-09-076-721-44

Query Match 87.9%; Score 51; DB 4; Length 27;  
Best Local Similarity 69.2%; Pred. No. 0.0016;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPDXXXNQ 13  
||| | | | |  
Db 8 QVYRPVDQYSNQ 20

RESULT 4  
US-09-076-721-45  
Sequence 45, Application US/09076721  
Patent No. 6379905  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/076,721  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/244,701  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Panucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE

## INFORMATION FOR SEQ ID NO: 45:

SEQUENCE CHARACTERISTICS:  
LENGTH: 27 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-09-076-721-45

Query Match 87.9%; Score 51; DB 4; Length 27;  
Best Local Similarity 69.2%; Pred. No. 0.0016;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPXDXNYNO 13  
||| | | | | |  
DB 8 QVYRPVDYNSQ 20

## RESULT 5

US-08-244-701B-16

Sequence 16, Application US/08244701B  
Patent No. 5773572

## GENERAL INFORMATION:

APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036

## COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/244,701B  
FILING DATE: 02-JUN-1994  
CLASSIFICATION: 436

## ATTORNEY/AGENT INFORMATION:

NAME: Fauccl, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741

## INFORMATION FOR SEQ ID NO: 16:

## SEQUENCE CHARACTERISTICS:

LENGTH: 28 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide

## FEATURE:

NAME/KEY: Modified-site  
LOCATION: 1

OTHER INFORMATION: /label-X

OTHER INFORMATION: /note- "X may be absent or present independently

OTHER INFORMATION: of Y and denotes one or more amino acid(s)"

## FEATURE:

NAME/KEY: Modified-site  
LOCATION: 28

OTHER INFORMATION: /label-Y

OTHER INFORMATION: /note- "Y may be absent or present independently

OTHER INFORMATION: of X and denotes one or more amino acid(s)"

US-08-244-701B-16

Query Match 87.9%; Score 51; DB 1; Length 28;  
Best Local Similarity 69.2%; Pred. No. 0.0017;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPXDXNYNO 13  
||| | | | | |  
DB 6 QVYRPVDYNSQ 18

## RESULT 6

US-08-244-701B-17

Sequence 17, Application US/08244701B  
Patent No. 5773572

## GENERAL INFORMATION:

APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036

## COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/244,701B  
FILING DATE: 02-JUN-1994  
CLASSIFICATION: 436

## ATTORNEY/AGENT INFORMATION:

NAME: Fauccl, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741

## INFORMATION FOR SEQ ID NO: 17:

## SEQUENCE CHARACTERISTICS:

LENGTH: 28 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide

## FEATURE:

NAME/KEY: Modified-site  
LOCATION: 1

OTHER INFORMATION: /label-X

OTHER INFORMATION: /note- "X may be absent or present independently

OTHER INFORMATION: of Y and denotes one or more amino acid(s)"

## FEATURE:

NAME/KEY: Modified-site  
LOCATION: 28

OTHER INFORMATION: /label-Y

OTHER INFORMATION: /note- "Y may be absent or present independently

OTHER INFORMATION: of X and denotes one or more amino acid(s)"

## FEATURE:

NAME/KEY: Modified-site  
LOCATION: 28

OTHER INFORMATION: /label-X

OTHER INFORMATION: /note- "X may be absent or present independently

OTHER INFORMATION: of Y and denotes one or more amino acid(s)"

US-08-244-701B-17

Query Match 87.9%; Score 51; DB 1; Length 28;  
Best Local Similarity 69.2%; Pred. No. 0.0017;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPXDXNYNO 13  
||| | | | | |  
DB 6 QVYRPVDYNSQ 18

RESULT 7  
US-08-244-701B-18  
Sequence 18, Application US/08244701B  
Patent No. 5773572  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/244,701B  
FILING DATE: 02-JUN-1994  
CLASSIFICATION: 436  
ATTORNEY/AGENT INFORMATION:  
NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
INFORMATION FOR SEQ ID NO: 18:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 28 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 1  
OTHER INFORMATION: /label=X  
OTHER INFORMATION: /note="X may be absent or present independently"  
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 28  
OTHER INFORMATION: /label=Y  
OTHER INFORMATION: /note="Y may be absent or present independently"  
OTHER INFORMATION: of X and denotes one or more amino acid(s)"  
US-08-244-701B-18  
Query Match 87.9%; Score 51; DB 1; Length 28;  
Best Local Similarity 69.2%; Pred. No. 0.0017;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1 QVYXXPXDXYYNQ 13  
DB 6 QVYXXPXDXYYNQ 18  
RESULT 8  
US-09-076-721-16  
Sequence 16, Application US/09076721  
Patent No. 6379905  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins

NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/076,721  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/244,701  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
INFORMATION FOR SEQ ID NO: 16:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 28 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 1  
OTHER INFORMATION: /label=X  
OTHER INFORMATION: /note="X may be absent or present independently"  
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 28  
OTHER INFORMATION: /label=Y  
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OTHER INFORMATION: of X and denotes one or more amino acid(s)"  
US-09-076-721-16  
Query Match 87.9%; Score 51; DB 4; Length 28;  
Best Local Similarity 69.2%; Pred. No. 0.0017;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1 QVYXXPXDXYYNQ 13  
DB 6 QVYXXPXDXYYNQ 18  
RESULT 9  
US-09-076-721-17  
Sequence 17, Application US/09076721  
Patent No. 6379905  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York

COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/076,721  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/244,701  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Panucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 17:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 28 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 1  
OTHER INFORMATION: /label-X  
OTHER INFORMATION: /note-"X may be absent or present independently  
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 28  
OTHER INFORMATION: /label-Y  
OTHER INFORMATION: /note-"Y may be absent or present independently  
OTHER INFORMATION: of X and denotes one or more amino acid(s)"  
US-09-076-721-17  
Query Match 87.9%; Score 51; DB 4; Length 28;  
Best Local Similarity 69.2%; Pred. No. 0.0017;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1 QVYXXPXDXYYNQ 13  
DB 6 QVYRPMDEYSNQ 18  
RESULT 10  
US-09-076-721-18  
Sequence 18, Application US/09076721  
Patent No. 6379905  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
TITLE OF INVENTION: Fragments of Pilon Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/076,721  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/244,701  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Panucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 18:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 28 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 1  
OTHER INFORMATION: /label-X  
OTHER INFORMATION: /note-"X may be absent or present independently  
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 28  
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OTHER INFORMATION: of X and denotes one or more amino acid(s)"  
US-09-076-721-18  
Query Match 87.9%; Score 51; DB 4; Length 28;  
Best Local Similarity 69.2%; Pred. No. 0.0017;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1 QVYXXPXDXYYNQ 13  
DB 6 QVYRPMDEYSNQ 18  
RESULT 11  
US-08-244-701B-13  
Sequence 13, Application US/08244701B  
Patent No. 5773572  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
TITLE OF INVENTION: Fragments of Pilon Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/244,701B  
FILING DATE: 02-JUN-1994  
CLASSIFICATION: 436  
ATTORNEY/AGENT INFORMATION:

NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 31 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 1  
OTHER INFORMATION: /label-X  
OTHER INFORMATION: /note-"X may be absent or present independently"  
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 31  
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OTHER INFORMATION: /note-"Y may be absent or present independently"  
OTHER INFORMATION: of X and denotes one or more amino acid(s)"  
US-08-244-701B-13

Query Match  
Best Local Similarity 87.9%; Score 51; DB 1; Length 31;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPXDXYXNQ 13  
DB 9 QVYRPVDOYSNQ 21

RESULT 12  
US-08-244-701B-14  
Sequence 14, Application US/08244701B  
Patent No. 5773572  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/244,701B  
FILING DATE: 02-JUN-1994  
CLASSIFICATION: 436  
ATTORNEY/AGENT INFORMATION:  
NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 14:  
SEQUENCE CHARACTERISTICS:

LENGTH: 31 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 1  
OTHER INFORMATION: /label-X  
OTHER INFORMATION: /note-"X may be absent or present independently"  
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 31  
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OTHER INFORMATION: /note-"Y may be absent or present independently"  
OTHER INFORMATION: of X and denotes one or more amino acid(s)"  
US-08-244-701B-14

Query Match  
Best Local Similarity 87.9%; Score 51; DB 1; Length 31;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPXDXYXNQ 13  
DB 9 QVYRPVDRISNQ 21

RESULT 13  
US-08-244-701B-15  
Sequence 15, Application US/08244701B  
Patent No. 5773572  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/244,701B  
FILING DATE: 02-JUN-1994  
CLASSIFICATION: 436  
ATTORNEY/AGENT INFORMATION:  
NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 15:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 31 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 1  
OTHER INFORMATION: /label-X



OTHER INFORMATION: /note- "X" may be absent or present independently,  
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 31  
OTHER INFORMATION: /label- Y  
OTHER INFORMATION: /note- "Y" may be absent or present independently  
OTHER INFORMATION: of X and denotes one or more amino acid(s)"  
US-08-244-701B-15

Query Match 87.9%; Score 51; DB 1; Length 31;  
Best Local Similarity 69.2%; Pred. No. 0.0019;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYYPXDXYNQ 13  
Db 9 QVYYPXDXYNQ 21

RESULT 14  
US-09-076-721-13  
Sequence 13, Application US/09076721  
Patent No. 6379905  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/076,721  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/244,701  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 31 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
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LOCATION: 1  
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OTHER INFORMATION: of Y and denotes one or more amino acid(s)"  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 31  
OTHER INFORMATION: /label- Y

OTHER INFORMATION: /note- "Y" may be absent or present independently  
OTHER INFORMATION: of X and denotes one or more amino acid(s)"  
US-09-076-721-13

Query Match 87.9%; Score 51; DB 4; Length 31;  
Best Local Similarity 69.2%; Pred. No. 0.0019;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYYPXDXYNQ 13  
Db 9 QVYYPXDXYNQ 21

RESULT 15  
US-09-076-721-14  
Sequence 14, Application US/09076721  
Patent No. 6379905  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/076,721  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/244,701  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 14:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 31 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 1  
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OTHER INFORMATION: of Y and denotes one or more amino acid(s)"  
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OTHER INFORMATION: of X and denotes one or more amino acid(s)"  
US-09-076-721-14

Query Match 87.9%; Score 51; DB 4; Length 31;  
Best Local Similarity 69.2%; Pred. No. 0.0019;

Wed Mar 26 09:13:02 2003

us-09-508-828b-2.rai

Page 8

Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXXPXDXYNQ 13

Db 9 QVYXRVPVDRYSNQ 21

Search completed: March 24, 2003, 17:23:05  
Job time : 13.4583 secs

GenCore version 5.1.4\_p5\_4578  
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using SW model

Run on: March 24, 2003, 17:23:11 ; Search time 11.6458 seconds  
(without alignments)  
59.679 Million cell updates/sec

Title: US-09-508-828B-2

Perfect score: 58

Sequence: 1 QVYXPDXKXNQ 13

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 221153 seqs, 53462247 residues

Total number of hits satisfying chosen parameters: 221153

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:\*

- 1: /cgn2\_6/ptodata/1/pubpaa/US08\_NEW\_PUB.pep.\*
- 2: /cgn2\_6/ptodata/1/pubpaa/PCT\_NEW\_PUB.pep.\*
- 3: /cgn2\_6/ptodata/1/pubpaa/US06\_NEW\_PUB.pep.\*
- 4: /cgn2\_6/ptodata/1/pubpaa/US06\_PUBCOMB.pep.\*
- 5: /cgn2\_6/ptodata/1/pubpaa/US07\_NEW\_PUB.pep.\*
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- 7: /cgn2\_6/ptodata/1/pubpaa/PCTUS\_PUBCOMB.pep.\*
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- 14: /cgn2\_6/ptodata/1/pubpaa/US60\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	51	87.9	46	9	US-09-939-780-4
2	51	87.9	46	10	US-09-147-761-4
3	51	87.9	161	10	US-09-745-003-7
4	51	87.9	161	10	US-09-745-003-9
5	51	87.9	162	10	US-09-745-003-10
6	51	87.9	164	10	US-09-745-003-12
7	51	87.9	253	10	US-09-904-987-3
8	51	87.9	253	10	US-09-919-172-57
9	51	87.9	253	10	US-09-943-906-2
10	51	87.9	254	9	US-10-106-574-5
11	51	87.9	254	9	US-10-106-574-6
12	51	87.9	254	9	US-10-106-574-7
13	51	87.9	254	9	US-10-106-574-8
14	51	87.9	254	10	US-09-943-906-1
15	51	87.9	255	10	US-09-943-906-4
16	51	87.9	256	9	US-10-109-551-2
17	51	87.9	256	9	US-10-109-551-4
18	51	87.9	263	10	US-09-943-906-3
19	51	87.9	264	9	US-10-209-194-2

20	51	87.9	439	9	US-10-115-984-2	Sequence 2, Appl1
21	50	86.2	163	10	US-09-745-003-11	Sequence 11, Appl
22	50	86.2	256	9	US-10-109-551-6	Sequence 6, Appl1
23	50	86.2	256	9	US-10-109-551-8	Sequence 8, Appl1
24	50	86.2	256	9	US-10-109-551-10	Sequence 10, Appl
25	46	79.3	338	9	US-09-738-626-4405	Sequence 4405, Ap
26	34	58.6	1511	10	US-09-801-368-250	Sequence 250, App
27	33	56.9	1564	10	US-09-801-368-244	Sequence 244, App
28	32	55.2	548	9	US-09-869-877-4	Sequence 4, Appl1
29	32	55.2	548	10	US-09-732-350-4	Sequence 4, Appl1
30	32	55.2	785	10	US-09-801-368-348	Sequence 348, App
31	31	53.4	401	9	US-09-738-626-6684	Sequence 6684, Ap
32	31	53.4	518	10	US-09-815-242-12473	Sequence 12473, A
33	31	53.4	564	10	US-09-815-242-12469	Sequence 12469, A
34	31	53.4	599	9	US-09-869-877-6	Sequence 6, Appl1
35	31	53.4	599	10	US-09-732-350-6	Sequence 6, Appl1
36	30	51.7	80	10	US-09-925-297-554	Sequence 554, App
37	30	51.7	116	10	US-09-867-550-650	Sequence 650, App
38	30	51.7	415	10	US-09-925-301-1192	Sequence 1192, Ap
39	30	51.7	481	10	US-09-901-884-7	Sequence 7, Appl1
40	30	51.7	483	9	US-09-738-626-4842	Sequence 4842, Ap
41	30	51.7	822	10	US-09-981-908-9	Sequence 9, Appl1
42	30	51.7	863	10	US-09-946-239-11	Sequence 11, Appl1
43	29	50.0	66	9	US-09-984-245-267	Sequence 267, App
44	29	50.0	66	9	US-09-966-262-267	Sequence 267, App
45	29	50.0	74	10	US-09-864-761-36478	Sequence 36478, A

## ALIGNMENTS

RESULT 1  
US-09-939-780-4  
Sequence 4, Application US/09939780  
Patent No. US20020168689A1  
GENERAL INFORMATION:  
APPLICANT: O'Connor, Michael  
TITLE OF INVENTION: Immunological Assay for Spongiform Encephalopathies  
FILE REFERENCE: 5000205  
CURRENT APPLICATION NUMBER: US/09/939,780  
PRIOR FILING DATE: 2001-08-28  
PRIOR APPLICATION NUMBER: 09/147,761  
PRIOR FILING DATE: 1999-03-03  
PRIOR APPLICATION NUMBER: PCT/IE98/00007  
NUMBER OF SEQ ID NOS: 5  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 4  
LENGTH: 46  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: Prion protein  
US-09-939-780-4

Query Match 87.9%; Score 51; DB 9; Length 46;  
Best Local Similarity 69.2%; Pred. No. 0.0016;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPDXKXNQ 13  
DB 32 QVYRPVDRYSNQ 44

RESULT 2  
US-09-147-761-4  
Sequence 4, Application US/09147761  
Patent No. US20010010918A1  
GENERAL INFORMATION:  
APPLICANT:  
TITLE OF INVENTION: IMMUNOLOGICAL ASSAY FOR SPONGIFORM  
ENCEPHALOPATHIES

NUMBER OF SEQUENCES: 4  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/147,761  
FILING DATE:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: WO IE/98/00007  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: CHRISTINA GATES  
REFERENCE/DOCKET NUMBER: PL678pct  
TELEPHONE: 353-1-6605033  
TELEFAX: 353-1-6606920  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 46  
TYPE: amino acid  
TOPOLOGY: unknown  
MOLECULE TYPE: amino acid  
HYPOTHETICAL:  
ANTI-SENSE:  
ORIGINAL SOURCE:  
ORGANISM:  
CELL TYPE:  
US-09-147-761-4

Query Match  
Best Local Similarity 87.9%; Score 51; DB 10; Length 46;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYYPXDXYXNQ 13  
DB 32 QVYYPVDYXNQ 44

RESULT 3  
US-09-745-003-7  
Sequence 7, Application US/09745003  
Patent No. US20020042122A1  
GENERAL INFORMATION:  
APPLICANT: Bazan, Fernando J  
TITLE OF INVENTION: Human Proteins; Related Reagents  
FILE REFERENCE: Prp2  
CURRENT APPLICATION NUMBER: US/09/745,003  
CURRENT FILING DATE: 2000-12-20  
NUMBER OF SEQ ID NOS: 13  
SOFTWARE: Patentin Ver. 2.0  
SEQ ID NO 7  
LENGTH: 161  
TYPE: Prt  
ORGANISM: sheep  
US-09-745-003-7

Query Match  
Best Local Similarity 87.9%; Score 51; DB 10; Length 161;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYYPXDXYXNQ 13  
DB 68 QVYYPVDYXNQ 80

RESULT 4  
US-09-745-003-9  
Sequence 9, Application US/09745003  
Patent No. US20020042122A1  
GENERAL INFORMATION:  
APPLICANT: Bazan, Fernando J

TITLE OF INVENTION: Human Proteins; Related Reagents  
FILE REFERENCE: Prp2  
CURRENT APPLICATION NUMBER: US/09/745,003  
CURRENT FILING DATE: 2000-12-20  
NUMBER OF SEQ ID NOS: 13  
SOFTWARE: Patentin Ver. 2.0  
SEQ ID NO 9  
LENGTH: 161  
TYPE: Prt  
ORGANISM: bovine  
US-09-745-003-9

Query Match  
Best Local Similarity 87.9%; Score 51; DB 10; Length 161;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYYPXDXYXNQ 13  
DB 68 QVYYPVDYXNQ 80

RESULT 5  
US-09-745-003-10  
Sequence 10, Application US/09745003  
Patent No. US20020042122A1  
GENERAL INFORMATION:  
APPLICANT: Bazan, Fernando J  
TITLE OF INVENTION: Human Proteins; Related Reagents  
FILE REFERENCE: Prp2  
CURRENT APPLICATION NUMBER: US/09/745,003  
CURRENT FILING DATE: 2000-12-20  
NUMBER OF SEQ ID NOS: 13  
SOFTWARE: Patentin Ver. 2.0  
SEQ ID NO 10  
LENGTH: 162  
TYPE: Prt  
ORGANISM: primate  
US-09-745-003-10

Query Match  
Best Local Similarity 87.9%; Score 51; DB 10; Length 162;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYYPXDXYXNQ 13  
DB 69 QVYYPVDYXNQ 81

RESULT 6  
US-09-745-003-12  
Sequence 12, Application US/09745003  
Patent No. US20020042122A1  
GENERAL INFORMATION:  
APPLICANT: Bazan, Fernando J  
TITLE OF INVENTION: Human Proteins; Related Reagents  
FILE REFERENCE: Prp2  
CURRENT APPLICATION NUMBER: US/09/745,003  
CURRENT FILING DATE: 2000-12-20  
NUMBER OF SEQ ID NOS: 13  
SOFTWARE: Patentin Ver. 2.0  
SEQ ID NO 12  
LENGTH: 164  
TYPE: Prt  
ORGANISM: rodent  
US-09-745-003-12

Query Match  
Best Local Similarity 87.9%; Score 51; DB 10; Length 164;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYYPXDXYXNQ 13  
DB 69 QVYYPVDYXNQ 81

RESULT 7  
US-09-904-987-3  
; Sequence 3, Application US/09904987  
; Patent No. US20020037908A1  
; GENERAL INFORMATION:  
; APPLICANT: No. US20020037908A1actyl, Inc.  
; TITLE OF INVENTION: Methods and Compositions for Controlling Pathological and Prepath  
; FILE REFERENCE: 42108/26146  
; CURRENT APPLICATION NUMBER: US/09/904,987  
; NUMBER OF SEQ ID NOS: 7  
; SOFTWARE: Patentin version 3.0  
; SEQ ID NO 3  
; LENGTH: 253  
; TYPE: PRT  
; ORGANISM: homo sapiens  
; PUBLICATION INFORMATION:  
; DATABASE ACCESSION NUMBER: NCBI ENTREZ / XM\_009567  
; DATABASE ENTRY DATE: 2001-04-17  
; RELEVANT RESIDUES: (1)..(253)  
US-09-904-987-3

Query Match 87.9%; Score 51; DB 10; Length 253;  
Best Local Similarity 69.2%; Pred. No. 0.0088;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPDXXNQ 13  
|||||  
Db 160 QVYRPMDEYSNQ 172

RESULT 8  
US-09-919-172-57  
; Sequence 57, Application US/09919172  
; Patent No. US20020119463A1  
; GENERAL INFORMATION:  
; APPLICANT: Turner, Christopher M.  
; TITLE OF INVENTION: PROSTATE CANCER MARKERS  
; FILE REFERENCE: PA-0036 US  
; CURRENT APPLICATION NUMBER: US/09/919,172  
; CURRENT FILING DATE: 2001-07-30  
; PRIOR APPLICATION NUMBER: 60/222,469  
; PRIOR FILING DATE: 2000-07-28  
; NUMBER OF SEQ ID NOS: 102  
; SOFTWARE: PERL Program  
; SEQ ID NO 57  
; LENGTH: 253  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: misc\_feature  
; OTHER INFORMATION: Incyte ID No. US20020119463A1 1256895CD1  
US-09-919-172-57

Query Match 87.9%; Score 51; DB 10; Length 253;  
Best Local Similarity 69.2%; Pred. No. 0.0088;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPDXXNQ 13  
|||||  
Db 160 QVYRPMDEYSNQ 172

RESULT 9  
US-09-943-906-2  
; Sequence 2, Application US/09943906  
; Patent No. US20020150571A1  
; GENERAL INFORMATION:  
; APPLICANT: Prubiner, Stanley B.

Williamson, R. Anthony  
Burton, Dennis R.  
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PRP  
NUMBER OF SEQUENCES: 86  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 2200 Sand Hill Road  
CITY: Menlo Park  
STATE: CA  
COUNTRY: U.S.A.  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/943,906  
FILING DATE: 30-Aug-2001  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 09/550,374  
FILING DATE: <Unknown>  
ATTORNEY/AGENT INFORMATION:  
NAME: Bozicevic, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 06510/059001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-854-5277  
TELEFAX: 415-854-0875  
TELEX: <Unknown>  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 253 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
SEQUENCE DESCRIPTION: SEQ ID NO: 2:  
US-09-943-906-2

Query Match 87.9%; Score 51; DB 10; Length 253;  
Best Local Similarity 69.2%; Pred. No. 0.0088;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

RESULT 10  
US-10-106-574-5  
; Sequence 5, Application US/10106574  
; Patent No. US20020164335A1  
; GENERAL INFORMATION:  
; APPLICANT: Harris, David A.  
; TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion  
; FILE REFERENCE: 09789280.0003  
; CURRENT APPLICATION NUMBER: US/10/106,574  
; CURRENT FILING DATE: 2002-03-26  
; NUMBER OF SEQ ID NOS: 8  
; SOFTWARE: Patentin version 3.1  
; SEQ ID NO 5  
; LENGTH: 254  
; TYPE: PRT  
; ORGANISM: Murinae gen. sp.  
US-10-106-574-5

Query Match 87.9%; Score 51; DB 9; Length 254;  
Best Local Similarity 69.2%; Pred. No. 0.0088;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYNQ 13  
| | | | |  
Db 159 QVYRPVDOYSNQ 171

RESULT 11  
US-10-106-574-6

Sequence 6, Application US/10106574  
Patent No. US20020164335A1  
GENERAL INFORMATION:  
APPLICANT: Harris, David A.  
TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Dis  
FILE REFERENCE: 09789280.0003  
CURRENT APPLICATION NUMBER: US/10/106,574  
CURRENT FILING DATE: 2002-03-26  
NUMBER OF SEQ ID NOS: 8  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 6  
LENGTH: 254  
TYPE: PRN  
ORGANISM: Murinae gen. sp.  
US-10-106-574-6

Query Match  
Best Local Similarity 87.9%; Score 51; DB 9; Length 254;  
Pred. No. 0.0088;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYNQ 13  
| | | | |  
Db 159 QVYRPVDOYSNQ 171

RESULT 12  
US-10-106-574-7

Sequence 7, Application US/10106574  
Patent No. US20020164335A1  
GENERAL INFORMATION:  
APPLICANT: Harris, David A.  
TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Dis  
FILE REFERENCE: 09789280.0003  
CURRENT APPLICATION NUMBER: US/10/106,574  
CURRENT FILING DATE: 2002-03-26  
NUMBER OF SEQ ID NOS: 8  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 7  
LENGTH: 254  
TYPE: PRN  
ORGANISM: Murinae gen. sp.  
US-10-106-574-7

Query Match  
Best Local Similarity 87.9%; Score 51; DB 9; Length 254;  
Pred. No. 0.0088;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYNQ 13  
| | | | |  
Db 159 QVYRPVDOYSNQ 171

RESULT 13  
US-10-106-574-8

Sequence 8, Application US/10106574  
Patent No. US20020164335A1  
GENERAL INFORMATION:  
APPLICANT: Harris, David A.  
TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Dis  
FILE REFERENCE: 09789280.0003  
CURRENT APPLICATION NUMBER: US/10/106,574  
CURRENT FILING DATE: 2002-03-26  
NUMBER OF SEQ ID NOS: 8

SOFTWARE: PatentIn version 3.1  
SEQ ID NO 8  
LENGTH: 254  
TYPE: PRN  
ORGANISM: Murinae gen. sp.  
US-10-106-574-8

Query Match  
Best Local Similarity 87.9%; Score 51; DB 9; Length 254;  
Pred. No. 0.0088;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYNQ 13  
| | | | |  
Db 159 QVYRPVDOYSNQ 171

RESULT 14  
US-09-943-906-1

Sequence 1, Application US/09943906  
Patent No. US20020150571A1  
GENERAL INFORMATION:  
APPLICANT: Prusiner, Stanley B.  
Burton, Dennis R.  
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP  
NUMBER OF SEQUENCES: 86  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 2200 Sand Hill Road  
CITY: Menlo Park  
STATE: CA  
COUNTRY: U.S.A.  
ZIP: 94025

COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/943,906  
FILING DATE: 30-Aug-2001  
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 09/550,374  
FILING DATE: <Unknown>  
ATTORNEY/AGENT INFORMATION:  
NAME: Bozicevic, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 06510/059001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-854-5277  
TELEFAX: 415-854-0875  
TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:

LENGTH: 254 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
SEQUENCE DESCRIPTION: SEQ ID NO: 1:  
US-09-943-906-1

Query Match  
Best Local Similarity 87.9%; Score 51; DB 10; Length 254;  
Pred. No. 0.0088;  
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYNQ 13  
| | | | |  
Db 159 QVYRPVDOYSNQ 171

RESULT 15



1

2

3

4



GenCore version 5.1.4\_p5\_4578  
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OM protein - protein search, using sw model

Run on: March 24, 2003, 17:16:57 ; Search time 37.1042 Seconds  
(without alignments)  
46.686 Million cell updates/sec

Title: US-09-508-828b-3  
Perfect score: 51  
Sequence: 1 CXTQYXXESXAXY 13

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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2: /SIDSL/gcgdata/geneseq/geneseqp-emb1/AA1981.DAT:\*

3: /SIDSL/gcgdata/geneseq/geneseqp-emb1/AA1982.DAT:\*

4: /SIDSL/gcgdata/geneseq/geneseqp-emb1/AA1983.DAT:\*

5: /SIDSL/gcgdata/geneseq/geneseqp-emb1/AA1984.DAT:\*

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9: /SIDSL/gcgdata/geneseq/geneseqp-emb1/AA1988.DAT:\*

10: /SIDSL/gcgdata/geneseq/geneseqp-emb1/AA1989.DAT:\*

11: /SIDSL/gcgdata/geneseq/geneseqp-emb1/AA1990.DAT:\*

12: /SIDSL/gcgdata/geneseq/geneseqp-emb1/AA1991.DAT:\*

13: /SIDSL/gcgdata/geneseq/geneseqp-emb1/AA1992.DAT:\*

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19: /SIDSL/gcgdata/geneseq/geneseqp-emb1/AA1998.DAT:\*

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21: /SIDSL/gcgdata/geneseq/geneseqp-emb1/AA2000.DAT:\*

22: /SIDSL/gcgdata/geneseq/geneseqp-emb1/AA2001.DAT:\*

23: /SIDSL/gcgdata/geneseq/geneseqp-emb1/AA2002.DAT:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	42	82.4	141	AAW17678	Syrian hamster prl
2	42	82.4	142	AAW92807	Mouse rprp protein
3	42	82.4	212	AA830802	Amino acid sequence
4	42	82.4	250	AA872369	Rabbit prion prote
5	42	82.4	254	AA893673	Partial nucleotide
6	42	82.4	254	AA882117	Hamster prp. Cric
7	42	82.4	254	AA861773	Hamster prion prot
8	42	82.4	254	AA815608	Hamster prp protein
9	42	82.4	257	AA804428	Hamster prion prot
10	41	80.4	13	AB808378	Mutant immunogenic

11	41	80.4	13	AB808379	Immunogenic peptid
12	41	80.4	15	AA838048	Prion protein regi
13	41	80.4	17	AA869083	Bovine prion prote
14	41	80.4	19	AB816332	Prion mimetic pept
15	41	80.4	22	AA838042	Bovine prion prote
16	41	80.4	22	AA838044	Ovine prion protei
17	41	80.4	22	AA838046	Human prion protei
18	41	80.4	24	AA838040	Prion protein regi
19	41	80.4	26	AA869085	Prion protein pept
20	41	80.4	30	AA874952	Human prp helix C
21	41	80.4	30	AA874953	Mutant human prp h
22	41	80.4	30	AA874954	Mutant human prp h
23	41	80.4	30	AA874955	Mutant human prp h
24	41	80.4	31	AA892806	Mouse prp protein
25	41	80.4	40	AB808377	Bovine prion polyp
26	41	80.4	142	AAW17686	Prion protein pept
27	41	80.4	208	AAW07316	Mouse prion protei
28	41	80.4	208	AAW07318	Mouse prion protei
29	41	80.4	208	AAW07327	Mouse prion protei
30	41	80.4	208	AAW07329	Mouse prion protei
31	41	80.4	211	AAW07329	Human prion protei
32	41	80.4	217	AAW07317	Amino acid sequenc
33	41	80.4	217	AAW07328	Cattle prion prote
34	41	80.4	219	AAW070261	Bovine prion prote
35	41	80.4	219	AAW93571	Bovine rprp prote
36	41	80.4	245	AAW72342	Monkey prion prote
37	41	80.4	245	AAW72352	Cerepithel prion p
38	41	80.4	253	AAW68715	Human prion protei
39	41	80.4	253	AAW68715	Human prion protei
40	41	80.4	253	AAW07994	Human prion protei
41	41	80.4	253	AAW85901	Human prion protei
42	41	80.4	253	AAW85901	Human prion protei
43	41	80.4	253	AAW85901	Human prion protei
44	41	80.4	253	AAW85901	Human prion protei
45	41	80.4	253	AAW85901	Human prion protei

#### ALIGNMENTS

RESULT 1

AAW17678

ID AAW17678 standard; peptide; 141 AA.

XX

AC AAW17678;

XX

DT 14-JAN-1998 (first entry)

XX

DE Syrian hamster prion protein peptide Sha 90-231.

XX

KW Prion protein; prp; alpha helical domain; screening; inhibition;

KW binding; scrapie; bovine spongiform encephalopathy; BSE; CJD;

KW Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;

KW Gerstmann-Strausler-Scheinker disease; hamster; human.

OS Mesocricetus auratus.

XX

PN W09716728-A1.

XX

PD 09-MAY-1997.

XX

PE 28-OCT-1996; 96WO-US17462.

XX

PR 02-NOV-1995; 95US-0556823.

XX

PA (REGC ) UNIV CALIFORNIA.

XX

PI Cohen FE, Kaneko K, Prusiner SB;

XX

DR WPI; 1997-272248/24.

XX

PT Prion proteins (PrPs) having at least one alpha-helical domain -

PT used in assays for screening compounds able to inhibit or decrease

PT the binding of PrP peptide(s) to cellular prion proteins or  
 XX peptide(s)  
 XX  
 PS Claim 11; Page 35-36; 50pp; English.  
 CC  
 CC The present sequence represents a prion protein (PrP) peptide from  
 CC Syrian hamster. PrP has an ability to induce a conformational change  
 CC in cellular prion protein (PrP<sup>C</sup>). Methods, for screening compounds  
 CC which inhibit the binding of PrP<sup>C</sup> to a PrP peptide, are used for  
 CC screening for drugs that may be useful in the treatment prion-related  
 CC disease e.g. scrapie, BSE (bovine spongiform encephalopathy), CJD  
 CC (Creutzfeldt-Jakob disease), Kuru, GSS (Gerstmann-Strausler-Scheinker  
 CC disease) and FFI (fatal familial insomnia).  
 XX  
 SQ Sequence 141 AA;  
 Query Match 82.4%; Score 42; DB 18; Length 141;  
 Best Local Similarity 61.5%; Pred. No. 0.077;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 1 CXTQYXXESXAXY 13  
 124 CTTQYQKESQAYY 136  
 RESULT 2  
 AAM92807  
 ID AAM92807 standard; protein; 142 AA.  
 AC AAM92807;  
 DT 07-MAY-1999 (first entry)  
 DE Mouse rPrP protein fragment.  
 XX  
 KW Murine; prion protein; PPMF; prion protein modulator factor; PrP;  
 KW PrP<sup>C</sup>; PrP<sup>Sc</sup>; scrapie; isoform; pathogenic; inhibitor; screening;  
 KW disease resistance; transgenic.  
 XX  
 OS Mus sp.  
 PN M09655132-A1.  
 PD 10-DEC-1998.  
 XX  
 PF 18-MAY-1998; 98WO-US10104.  
 PR 12-MAY-1998; 98US-0076606.  
 PR 02-JUN-1997; 97US-0868162.  
 PA (REGC ) UNIV CALIFORNIA.  
 PI Cohen FE, James TL, Kaneko K, Prusiner SB;  
 WPI: 1999-080819/07.  
 PS Novel Prion Protein Modulation Factor(s) - useful to increase speed  
 and sensitivity of assays to detect pathogenic prion proteins  
 PS Disclosure: Fig 6A-B; 93pp; English.  
 XX  
 CC This invention describes a composition of Prion Protein Modulation  
 CC Factor (PPMF) which binds the prion protein PrP<sup>C</sup> and facilitates a  
 CC conformational change from PrP<sup>C</sup> to the scrapie isoform of the PrP  
 CC protein, PrP<sup>Sc</sup>. PPMF is involved in complex formation as the rate  
 CC limiting step. The protein can therefore be used in assays to  
 CC "speed up" formation of the complex and conversion of prion proteins  
 CC to the pathogenic stage and thus can be used to rapidly detect the  
 CC presence of pathogenic prion proteins in a sample. The compositions  
 CC can be used to screen for compounds that inhibit PrP<sup>Sc</sup> formation.  
 CC The gene can also be used to generate transgenic animals which are  
 CC resistant to prion diseases.

SQ Sequence 142 AA;  
 Query Match 82.4%; Score 42; DB 20; Length 142;  
 Best Local Similarity 61.5%; Pred. No. 0.077;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 1 CXTQYXXESXAXY 13  
 125 CTTQYQKESQAYY 137  
 RESULT 3  
 AAB30802  
 ID AAB30802 standard; Protein; 212 AA.  
 AC AAB30802;  
 DT 02-APR-2001 (first entry)  
 DE Amino acid sequence of a Syrian hamster prion protein.  
 XX  
 KW SCHAG; self-coalesce; higher-order aggregate; amyloidogenic domain;  
 KW aggregation; fibril; phenotypic alteration; gene therapy;  
 KW disease resistance; plant pigmentation; prion disease.  
 XX  
 OS Mesocricetus auratus.  
 PN M0200075324-A2.  
 PD 14-DEC-2000.  
 XX  
 PF 09-JUN-2000; 2000WO-US15876.  
 PR 09-JUN-1999; 99US-0138833.  
 PA (ARCH-) ARCH DEV CORP.  
 PI Lindquist S, Li L, Ma J, Liu J, Sondheimer N, Scheibel T;  
 WPI: 2001-061723/07.  
 DR N-PSDB; AAC86687.  
 XX  
 PT New nucleic acid encoding chimeric proteins with self-assembly  
 PT properties, useful e.g. for diagnosis and treatment of prion diseases,  
 PT also related aggregates, fibrils and polymers -  
 XX  
 PS Claim 11; Page 139-140; 188pp; English.  
 XX  
 CC The present sequence represents a prion protein. The specification  
 CC describes chimeric polypeptides, which comprise at least one SCHAG  
 CC (self-coalesces into higher-order aggregates) amino acid sequence fused  
 CC in frame with a polypeptide of interest (which is other than a marker  
 CC protein, a glutathione-S-transferase or a staphylococcal nuclear  
 CC protein). The specification also describes chimeric polypeptides that  
 CC comprises an amyloidogenic domain that causes aggregation into fibrils.  
 CC The chimeric polypeptides are used to prepare polymers with multiple  
 CC reactivities, e.g. derivatised with enzymes, or specific binding  
 CC partners, and useful e.g. for performing multi-step chemical reactions.  
 CC They can be used to create an inducible, or stable phenotypic alteration  
 CC in a cell, e.g. for gene therapy, protein production, imparting disease  
 CC resistance to plants, altering plant pigmentation and for diagnosis  
 CC and treatment of prion diseases.  
 XX  
 SQ Sequence 212 AA;  
 Query Match 82.4%; Score 42; DB 22; Length 212;  
 Best Local Similarity 61.5%; Pred. No. 0.12;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 1 CXTQYXXESXAXY 13  
 194 CTTQYQKESQAYY 206

[illegible]

XX	DE	Partial nucleotide sequence of Hamster PrP gene.
XX	KM	Scrapie; PrP gene; Bovine spongiform encephalopathy; BSE;
XX	KW	scrapie associated fibrils; SAF.
XX	OS	Cricetus sp.
XX	PN	MO8911545-A.
XX	PD	30-NOV-1989.
XX	PF	15-MAY-1989; 89WO-GB00522.
XX	PR	17-MAY-1988; 88GB-0011608.
XX	PA	(ANIM-) ANIMAL HEALTH LTD.
XX	PI	Hope J, Hunter N;
XX	IDR	WPI; 1989-370736/50.
XX	IDR	N-PSDB; AAN92724.
XX	PT	Detecting susceptibility to scrapie in sheep, cattle and goats -
XX	PT	by analysing blood or tissue for polymorphism linked to
XX	PT	susceptibility, pref. using DNA hybridisation probe.
XX	PS	Disclosure; : 46pp; English.
XX	CC	Product of partial hamster PrP gene, which is sufficiently similar to
XX	CC	the sheep slip gene (scrapie susceptibility), that the probe (pEA974) can
XX	CC	be made to the site.
XX	CC	See also AAN92735.
XX	SQ	Sequence 254 AA;
OY		
Db	1 CXTGYXESXAXY 13	82.4%; Score 42; DB 10; Length 254;
		Best Local Similarity 61.5%; Pred. NO. 0.14;
	214 CTTGYKESQAY 226	Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0.
RESULT 6		
AAB82117		
ID	AAB82117 standard; Protein; 254 AA.	
AC	AAB82117;	
AD		
DT	29-JUN-2001 (first entry)	
XX		
DE	Hamster PrP.	
KW	Hamster; PrP; cerebroprotective; PrP conversion inhibitor; prion protein;	
KW	transmissible spongiform encephalopathy; TSE; neurodegenerative disease;	
KW	protease-sensitive prion protein; PrPsen;	
KW	protease-resistant prion protein; PrPres.	
OS	Cricetus griseus.	
XX		
PN	US6211149-B1.	
PD	03-APR-2001.	
PF	03-AUG-1998; 98US-0128450.	
PR	03-AUG-1998; 98US-0128450.	
XX	(USSH ) US DEPT HEALTH & HUMAN SERVICES.	
PI	Chasebro BW, Caughey BW, Chabry J, Priola S;	

XX WPI; 2001-315407/33.  
 DR N-PSDB; AAF86478.  
 XX  
 XX New peptide comprises hamster prion protein fragment that inhibits  
 PT conversion of prion protein from protease-sensitive to  
 PT protease-resistant form, useful for diagnosis and treatment of  
 PT spongiform encephalopathies -  
 XX  
 XX Disclosure; Column 39-42; 31pp; English.  
 XX  
 XX Transmissible spongiform encephalopathies (TSE) are fatal  
 CC neurodegenerative diseases. These diseases are characterised by the  
 CC formation and accumulation, in the brain, of an abnormal proteinase K  
 CC resistant isoform (PrPres) of a normal protease-sensitive host-encoded  
 CC prion protein (PrPres). The present invention relates to peptides  
 CC comprising a hamster, human or murine prion protein (PrP) fragment which  
 CC specifically inhibit the conversion of protease-sensitive prion protein  
 CC (PrPres) to protease-resistant prion protein (PrPres). The present  
 CC sequence is the protein sequence for hamster PrP. The peptides of the  
 CC present invention are useful for diagnosis and treatment of TSE  
 CC diseases.  
 XX  
 XX Sequence 254 AA:  
 SQ  
 Query Match 82.4%; Score 42; DB 22; Length 254;  
 Best Local Similarity 61.5%; Pred. No. 0.14;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 1 CXTGYXXESXAXY 13  
 | | | | | | | | | |  
 Db 214 CTTGYKESQAYY 226  
 RESULT 7  
 AAB61773  
 ID AAB61773 standard; protein; 254 AA.  
 AC AAB61773;  
 XX  
 XX 20-APR-2001 (first entry)  
 DT  
 XX  
 DE Hamster prion protein (PrP) sequence.  
 XX  
 XX Prion; neuroprotective; vaccine; prion protein peptide; PrP; PrPSc;  
 KW immunisation; antigenic; antibody; Creutzfeldt-Jakob disease; CJD;  
 KW Kuru; Gerstmann-Strausler syndrome; fatal familial insomnia; scrapie;  
 KW spongiform encephalopathy; hamster.  
 XX  
 OS Mesocricetus auratus.  
 XX  
 XX MO200078344-A1.  
 PN  
 XX  
 XX 28-DEC-2000.  
 PD  
 XX  
 XX 23-JUN-2000; 2000WO-US17455.  
 PF  
 XX  
 XX 23-JUN-1999; 99US-0140634.  
 PR  
 XX  
 XX (CAPR-) CAPRION PHARM INC.  
 PA  
 XX  
 XX Cashman NR, Paramithiotis E, Slon-Usakiewicz J, Haghighat A;  
 PI Plamad M;  
 XX  
 XX WPI; 2001-102614/11.  
 DR  
 XX  
 XX New antibody for diagnosing, preventing and treating prion diseases  
 PT such as Creutzfeldt-Jakob disease, Kuru, insomnia in human and  
 PT livestock species -  
 XX  
 XX Disclosure; Fig 2; 81pp; English.  
 PS  
 XX  
 XX The invention relates to an antibody (I) that binds with high-binding

CC affinity to a YXX epitope of a mammalian prion protein peptide (PrP),  
 CC PrPSc. (I) is useful for detecting PrPSc in a biological sample such as  
 CC a tissue or cell, their extracts, a bodily fluid or a biopsy from a  
 CC human, livestock species, or a pet species, by forming a complex between  
 CC PrPSc and (I). (I) is useful for preventing or treating a PrPSc disease  
 CC in a mammal, for decontaminating PrPSc from a biological sample or for  
 CC inhibiting PrPSc in a biological sample, where the sample is perfused  
 CC with the antibody. A vaccine comprising (I) or a peptide that has  
 CC antigenicity as a PrPSc is useful for immunizing a mammal against PrPSc  
 CC disease. Such antigenic peptides and synthetic peptides are useful as  
 CC immunogens for generating antibodies specific for PrPSc. The prion  
 CC diseases that can be diagnosed or treated include Creutzfeldt-Jakob  
 CC disease (CJD), variant CJD, iatrogenic CJD, familial CJD, Kuru, Gerstmann  
 CC -Strausler syndrome and fatal familial insomnia in humans, scrapie in  
 CC sheep and goats and spongiform encephalopathy in cattle. The present  
 CC sequence represents a hamster prion protein amino acid sequence.  
 XX  
 XX Sequence 254 AA:  
 SQ  
 Query Match 82.4%; Score 42; DB 22; Length 254;  
 Best Local Similarity 61.5%; Pred. No. 0.14;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 1 CXTGYXXESXAXY 13  
 | | | | | | | | | |  
 Db 214 CTTGYKESQAYY 226  
 RESULT 8  
 AAEL5608  
 ID AAEL5608 standard; protein; 254 AA.  
 XX  
 XX AAEL5608;  
 AC  
 XX  
 XX 12-MAR-2002 (first entry)  
 DT  
 XX  
 XX Hamster PrP protein.  
 DE  
 XX  
 XX Protease resistant prion protein; PrPres; Creutzfeldt-Jakob disease;  
 KW protease sensitive prion protein; PrPres; therapy; neuroprotectant;  
 KW transmissible spongiform encephalopathy; fatal familial insomnia;  
 KW Gerstmann-Strausler-Scheinker syndrome; scrapie; kuru; hamster.  
 XX  
 OS Cricetus sp.  
 XX  
 XX US2001041790-A1.  
 PN  
 XX  
 XX 15-NOV-2001.  
 PD  
 XX  
 XX 30-MAR-2001; 2001US-0823494.  
 PF  
 XX  
 XX 12-MAY-1998; 98US-085160P.  
 PR  
 XX  
 XX 03-AUG-1998; 98US-0128450.  
 PR  
 XX  
 XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
 PA  
 XX  
 XX Chesebro BW, Caughey BW, Chabry J, Priola S;  
 PI WPI: 2002-065984/09.  
 DR  
 XX  
 XX N-PSDB; AAD24906.  
 DR  
 XX  
 XX Peptides which can inhibit conversion of prion proteins from protease  
 PT sensitive to protease resistant forms, are useful in treating  
 PT transmissible spongiform encephalopathies -  
 XX  
 XX Disclosure; Page 22; 33pp; English.  
 PS  
 XX  
 XX The present invention relates to peptides comprising a peptide region of  
 CC prion protein (PrP) and which are capable of inhibiting conversion of  
 CC protease sensitive prion protein (PrPres) to protease resistant prion  
 CC protein (PrPres). The peptides are useful for inhibiting formation of  
 CC protease resistant prion proteins, such as those associated with  
 CC transmissible spongiform encephalopathies, e.g., Creutzfeldt-Jakob

CC disease, kuru, Gerstmann-Strausler-Scheinker syndrome, fatal familial  
 CC insomnia or scrapie. The peptides can be used as diagnostic agents, e.g.,  
 CC to detect the presence of PrP<sup>res</sup> in body fluids such as blood. They may  
 CC also be used to treat or prevent diseases such as the above. They may  
 CC also be used to design analogues, derivatives or mimetics for use as  
 CC inhibitors of conversion of PrP<sup>sen</sup> to PrP<sup>res</sup>. The present sequence is  
 CC hamster PrP protein.

XX Sequence 254 AA;

Query Match 82.4%; Score 42; DB 23; Length 254;  
 Best Local Similarity 61.5%; Pred. No. 0.14;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13  
 DB 214 CXTQYXXESXAY 226

RESULT 9

ABR04428 standard; Protein; 257 AA.

XX ABR04428;

XX 04-MAR-2002 (first entry)

XX Hamster prion protein PrP.

XX Hamster prion protein PrP.

XX Hamster prion protein; PrP; antiviral; HIV; prion disease; kuru;  
 KM antibacterial; neuroprotective; anti-HIV; Creutzfeldt-Jakob disease;  
 KM Gerstmann-Strausler-Scheinker disease; fatal familial insomnia;  
 KM bovine spongiform encephalitis; scrapie; virucide.

XX Cricetus griseus.

XX MO200183747-A2.

XX 08-NOV-2001.

XX 30-APR-2001; 2001WO-FR01336.

XX 28-APR-2000; 2000FR-0005535.

XX (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.

XX Leblanc P, Darlix J, Gabus-Darlix C;

XX WPI; 2002-049350/06.

XX New polypeptides, useful as antiviral agents, comprise their prion  
 PT proteins able to bind nucleic acid, nucleocapsid proteins, and ligands  
 PT for use as anti-prion agents -

XX Disclosure; Fig 9; 80pp; French.

XX The present invention relates to normal (PrP<sup>c</sup>) or abnormal (PrP<sup>sc</sup>) human  
 CC or animal prion proteins which are able to bind to DNA or RNA.  
 CC particularly of viral, especially retroviral, origin and to nucleocapsid  
 CC proteins (NCP) of human or animal retroviruses. These can be used as  
 CC antiviral agents, particularly against human immune deficiency virus  
 CC (HIV), and in the treatment of prion diseases including Creutzfeldt-Jakob  
 CC disease, Gerstmann-Strausler-Scheinker disease, fatal familial  
 CC insomnia, kuru, bovine spongiform encephalitis and scrapie. The present  
 CC sequence is the hamster PrP protein sequence.

XX Sequence 257 AA;

Query Match 82.4%; Score 42; DB 23; Length 257;  
 Best Local Similarity 61.5%; Pred. No. 0.14;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13

DB 217 CXTQYXXESXAY 229

RESULT 10

ABR08378 standard; peptide; 13 AA.

XX ABR08378;

XX 22-APR-2002 (first entry)

XX Mutant immunogenic peptide derived from bovine prion protein.

XX Prion; BSE; bovine spongiform encephalopathy; vCJD;  
 KM new variant Creutzfeldt-Jakob disease; scrapie; TSE;  
 KM transmissible spongiform encephalopathy; antibody; PrP<sup>sc</sup>; PrP<sup>c</sup>; vaccine;  
 KM CJD; Creutzfeldt-Jakob disease; cow.

XX Bos taurus.

XX Key Location/Qualifiers

XX MISC-difference 6 /note="wild-type Gln is replaced by Glu."

XX EP1158003-A1.

XX 28-NOV-2001.

XX 23-MAY-2000; 2000EP-0111108.

XX 23-MAY-2000; 2000EP-0111108.

XX (BLOO-) BLOOD TRANSFUSION CENT SLOVENIA.

XX Curin-Serbec V;

XX WPI; 2002-107827/15.

XX New antibody, useful in diagnosis and treatment of BSE, CJD, new  
 PT variant CJD and other Transmissible Spongiform Encephalopathy related  
 PT diseases, selectively binds to the infectious form of the prion protein

XX Claim 3; Page 10; 21pp; English.

XX The invention relates to an antibody selectively binding to the three  
 CC dimensional conformation of the C-terminal of the infectious 'scrapie'  
 CC (PrP<sup>sc</sup>) isoform of the prion protein (or a part), but not binding to the  
 CC structure of the C-terminal of the normal cellular (PrP<sup>c</sup>) isoform of  
 CC the prion protein. The antibodies (or functional parts) are useful in the  
 CC diagnosis of Bovine Spongiform Encephalopathy (BSE), Creutzfeldt-Jakob  
 CC Disease (CJD), new variant form CJD (vCJD) and other Transmissible  
 CC Spongiform Encephalopathy (TSE) related diseases e.g. in humans, cows,  
 CC sheep etc., since they can differentiate between the infectious (PrP<sup>sc</sup>)  
 CC isoform and the normal cellular (PrP<sup>c</sup>) isoform of the prion protein.  
 CC They are also useful in the treatment of such diseases. They may be  
 CC included in pharmaceutical compositions or used to produce drugs or  
 CC active and/or passive vaccines against diseases as above. The  
 CC anti-idiotypic antibodies of the polypeptides of the invention may also  
 CC be used to produce drugs or vaccines against such diseases. The current  
 CC sequence represents a mutant immunogenic peptide derived from bovine  
 CC prion protein C-terminal region (see ABR08377). This sequence is created  
 CC from the wild-type sequence by replacement of the Gln residue at position  
 CC 6 of the peptide with Glu. This sequence has proven to elicit an immune  
 CC response sufficiently strong enough to be capable of easily raising  
 CC antibodies specifically against PrP<sup>sc</sup>.

XX Sequence 13 AA;

Query Match 80.4%; Score 41; DB 23; Length 13;  
 Best Local Similarity 61.5%; Pred. No. 0.01;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAMY 13  
 DB 1 CITOYQRESQAVY 13

## RESULT 11

ABB08379 standard; peptide; 13 AA.

ABB08379;

22-APR-2002 (first entry)

Immunogenic peptide derived from bovine prion protein.

Prion; BSE; bovine spongiform encephalopathy; vCJD;

new variant Creutzfeldt-Jakobs disease; scrapie; TSE;

transmissible spongiform encephalopathy; antibody; PrPsc; PrPc; vaccine;

CJD; Creutzfeldt-Jakobs disease; cow.

Bos taurus.

EP1158003-A1.

28-NOV-2001.

23-MAY-2000; 2000EP-0111108.

23-MAY-2000; 2000EP-0111108.

(BLOO-) BLOOD TRANSFUSION CENT SLOVENIA.

CurIn-Serbec V;

WPI; 2002-107827/15.

New antibody, useful in diagnosis and treatment of BSE, CJD, new variant CJD and other Transmissible Spongiform Encephalopathy related diseases, selectively binds to the infectious form of the prion protein

Claim 18; Page 11; 21pp; English.

The invention relates to an antibody selectively binding to the three dimensional conformation of the C-terminal of the infectious 'scrapie' (PrPsc) isoform of the prion protein (or a part), but not binding to the structure of the C-terminal of the normal cellular (PrPc) isoform of the prion protein. The antibodies (or functional parts) are useful in the diagnosis of Bovine Spongiform Encephalopathy (BSE), Creutzfeldt-Jakobs Disease (CJD), new variant form CJD (vCJD) and other Transmissible Spongiform Encephalopathy (TSE) related diseases e.g. in humans, cows, sheep etc., since they can differentiate between the infectious (PrPsc) isoform and the normal cellular (PrPc) isoform of the prion protein. They are also useful in the treatment of such diseases. They may be included in pharmaceutical compositions or used to produce drugs or active and/or passive vaccines against diseases as above. The anti-idiotypic antibodies of the polypeptides of the invention may also be used to produce drugs or vaccines against such diseases. The current sequence represents an immunogenic peptide derived from bovine prion protein C-terminal region (see ABB08377).

Sequence 13 AA;

Query Match 80.4%; Score 41; DB 23; Length 13;

Best Local Similarity 61.5%; Pred. No. 0.01; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAMY 13  
 DB 1 CITOYQRESQAVY 13

RESULT 12  
 AAR38048 standard; protein; 15 AA.

AAR38048;

14-OCT-1993 (first entry)

Prion protein region F #2.

Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;

Fsa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;

human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;

immune system; PrPac; ratio-inverse peptide; enzymatic degradation;

resistance.

Synthetic.

WO9311155-A.

10-JUN-1993.

03-DEC-1992; 92WO-GB02246.

03-DEC-1991; 91GB-0025747.

10-JUL-1992; 92GB-0014663.

(PROT-) PROTEUS MOLECULAR DESIGN LTD.

Fishleigh RV, Mee RP, Robson B;

WPI; 1993-196994/24.

New polypeptide(s) contg. antigenic site of prion protein -

useful for treatment and diagnosis of mammalian encephalopathies

e.g. Creutzfeldt-Jacob disease and kuru

Claim 29; Page 74; 82pp; English.

The sequences given in AAR38041-48 represent polypeptides which are derived from an antigenic site, region F, of a prion protein. Prion proteins comprise six regions of interest (A-F), and two related frame shift peptides sequences caused by a repeating section in region E having a nucleic acid coding sequence frame shift mutation of +1 (Fsa) or -1 (Fsb). These peptides (see also AAR38041-48) and antibodies raised against these may be used to treat or prevent spongiform encephalopathy in humans, sheep or cattle. They can be used to block cellular binding and aggregation of prion proteins and to stimulate the mammalian immune system. These peptides may be used to distinguish between the normal form of prion protein (PrPc) and the scrapie-associated form (PrPac). These peptides may include rare or synthetic amino acids or a ratio-inverse peptide modification to improve resistance to enzymatic degradation.

Sequence 15 AA;

Query Match 80.4%; Score 41; DB 14; Length 15;

Best Local Similarity 61.5%; Pred. No. 0.012; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAMY 13  
 DB 1 CITOYQRESQAVY 13

## RESULT 13

AAB69083 standard; peptide; 17 AA.

AAB69083;

23-APR-2001 (first entry)

DE Bovine prion protein peptide SEQ ID NO:3.  
 XX Monoclonal antibody; detection; prion protein; TSE; infection;  
 KM transmissible spongiform encephalopathy; scrapie; bovine encephalopathy;  
 KM chronic wasting disease; PrP-Sc.  
 XX  
 OS Bos taurus.  
 XX  
 PN WO200105426-A1.  
 XX  
 PD 25-JAN-2001.  
 XX  
 PF 14-JUL-2000; 2000MO-US19211.  
 XX  
 PR 15-JUL-1999; 99US-0353348.  
 XX  
 PA (USDA ) US DEPT OF AGRICULTURE.  
 XX  
 PI O'Rourke KI;  
 XX  
 DR WPI; 2001-159477/16.  
 XX  
 PT Monoclonal antibodies for detecting prior proteins as an indication of  
 PT transmissible spongiform encephalopathies, specifically binds to  
 PT conserved group of prior proteins -  
 XX  
 PS Example 2; Page 12; 25pp; English.  
 XX  
 CC The present invention describes a monoclonal antibody (I) which  
 CC specifically binds to a conserved epitope of prion proteins, which is  
 CC capable of binding prion protein (PrP)-Sc protein in fixed or unfixed  
 CC tissue that has been treated to unmask the group in PrP-Sc protein and  
 CC eliminate availability of a corresponding group of PrP-Cellular. (I) can  
 CC be used in immunoassays to detect PrP-Sc proteins in animal or human,  
 CC including ruminant livestock, cats, mink and non-human primates, sheep,  
 CC goat, cattle, mule deer and elk, as an indication of the presence of  
 CC transmissible spongiform encephalopathies (TSE). Presence of PrP-Sc  
 CC indicates the scrapie-, bovine encephalopathy- or chronic wasting  
 CC disease-infected animals. The antibodies provide early detection of  
 CC PrP-Sc and for preclinical diagnosis of TSE. The present sequence  
 CC represents a prion protein peptide which is used in an example from  
 CC the present invention.  
 XX  
 SQ Sequence 17 AA;  
 Query Match 80.4%; Score 41; DB 22; Length 17;  
 Best Local Similarity 61.5%; Pred. No. 0.014;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 OY 1 CXTQYXXESKAXY 13  
 DB 1 CXTQYXXESKAXY 13  
 XX  
 RESULT 14  
 ABB81632  
 ID ABB81632 standard; peptide; 19 AA.  
 XX  
 AC ABB81632;  
 XX  
 DT 25-SEP-2002 (first entry)  
 XX  
 DE Prion mimetic peptide SEQ ID NO:4.  
 XX  
 KM Prion mimetic peptide; degradation; detection; TSE; infection;  
 KM transmissible spongiform encephalopathy; prion protein; sterilisation;  
 KM immunisation; Creutzfeldt-Jacob disease; kuru; fatal familial insomnia;  
 KM Gerstmann-Strausler-Scheinker syndrome; chronic wasting disease;  
 KM bovine spongiform encephalopathy; feline spongiform encephalopathy;  
 KM scrapie; transmissible mink encephalopathy.  
 XX  
 OS Synthetic.  
 XX

PN WO200253723-A2.  
 XX  
 PD 11-JUL-2002.  
 XX  
 PF -08-JAN-2002; 2002MO-GB00052.  
 XX  
 PR 08-JAN-2001; 2001GB-0000420.  
 XX  
 PR 26-FEB-2001; 2001GB-0004696.  
 XX  
 PA (MICR-) MICROBIOLOGICAL RES AUTHORITY.  
 XX  
 PI Raven NDH;  
 XX  
 DR WPI; 2002-557743/59.  
 XX  
 PT Inactivating transmissible spongiform encephalopathy (TSE) agent such  
 PT as Creutzfeldt-Jacob disease, scrapie, kuru or  
 PT Gerstmann-Strausler-Scheinker syndrome involves exposing agent to  
 PT thermostable proteolytic enzyme -  
 XX  
 PS Example; Page 19; 41pp; English.  
 XX  
 CC The present invention describes a method (M1) for inactivating a  
 CC transmissible spongiform encephalopathy (TSE) agent comprising exposing  
 CC the TSE agent to a thermostable proteolytic enzyme. Also described:  
 CC (1) a composition (I) for inactivating a TSE agent, comprising a  
 CC thermostable proteolytic enzyme; (2) an antibody (II) specific for a  
 CC prion dimer which does not bind to a prion monomer; and (3) a purified  
 CC prion dimer. (M1) is useful for inactivating a TSE agent such as a prion.  
 CC A TSE agent is Creutzfeldt-Jacob disease or its variant, kuru, fatal  
 CC familial insomnia, Gerstmann-Strausler-Scheinker syndrome, bovine  
 CC spongiform encephalopathy, scrapie, feline spongiform encephalopathy,  
 CC chronic wasting disease or transmissible mink encephalopathy. (I) is  
 CC useful for sterilising material contaminated with the TSE agent. A prion  
 CC dimer is useful for examining a sample infected with or suspected to be  
 CC infected by a prion protein, and for detecting prion infectivity, by  
 CC detecting a prion dimer in the sample. A prion dimer is useful for  
 CC producing (II), by immunising an animal with a prion dimer, obtaining its  
 CC extract which contains (II), and isolating (II) from the extract. The  
 CC method comprises obtaining an antibody preparation containing antibodies  
 CC which bind a prion dimer, and removing (II) from the preparation. (M1)  
 CC and (I) are useful for inactivating TSE agents in potentially  
 CC contaminated clinical waste and culled animal material. (M1) is useful  
 CC for sterilising larger surface areas of apparatus, operating tables or  
 CC even walls of rooms. The present sequence represents a prion mimetic  
 CC peptide which is used in an example from the present invention in the  
 CC preparation of antibodies including dimer preferential antibodies.  
 XX  
 SQ Sequence 19 AA;  
 Query Match 80.4%; Score 41; DB 23; Length 19;  
 Best Local Similarity 61.5%; Pred. No. 0.016;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 OY 1 CXTQYXXESKAXY 13  
 DB 1 CXTQYXXESKAXY 13  
 XX  
 RESULT 15  
 AAR38042  
 ID AAR38042 standard; protein; 22 AA.  
 XX  
 AC AAR38042;  
 XX  
 DT 14-OCT-1993 (first entry)  
 XX  
 DE Bovine prion protein region F #2.  
 XX  
 KM Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;  
 KM Psa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;  
 KM human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;  
 KM immune system; PrPsc; ratio-inverso peptide; enzymatic degradation;

Search completed: March 24, 2003, 17:19:41  
 Job time : 37.1042 secs

resistance.  
 Synthetic.

Key Location/Qualifiers

Misc-difference 1 /note= "One or more residues or may be absent"  
 Misc-difference 2 /note= "May be absent"  
 Misc-difference 3 /note= "May be absent"  
 Misc-difference 4 /note= "May be absent"  
 Misc-difference 5 /note= "May be absent"  
 Misc-difference 18 /note= "May be absent"  
 Misc-difference 19 /note= "May be absent"  
 Misc-difference 20 /note= "May be absent"  
 Misc-difference 21 /note= "May be absent"  
 Misc-difference 22 /note= "May be absent"  
 Misc-difference 22 /note= "One or more residue or may be absent"

W09311155-A.

10-JUN-1993.

03-DEC-1992; 92MO-GB02246.

03-DEC-1991; 91GB-0025747.

10-JUL-1992; 92GB-0014663.

(PROT-) PROTEUS MOLECULAR DESIGN LTD.

Fishleigh RV, Mee RP, Robson B;

WPI; 1993-196994/24.

New polypeptide(s) contg. antigenic site of prion protein -  
 useful for treatment and diagnosis of mammalian encephalopathies  
 e.g. Creutzfeldt-Jacob disease and Kuru  
 Claim 28; Page 74; 82pp; English.

The sequences given in AAR38041-48 represent polypeptides which are  
 derived from an antigenic site, region F, of a prion protein. Prion  
 proteins comprise six regions of interest (A-F), and two related frame  
 shift peptides sequences caused by a repeating section in region E  
 having a nucleic acid coding sequence frame shift mutation of +1 (FSa)  
 or -1 (FSb). These peptides (see also AAR38041-48) and antibodies  
 raised against these may be used to treat or prevent spongiform  
 encephalopathy in humans, sheep or cattle. They can be used to block  
 cellular binding and aggregation of prion proteins and to stimulate the  
 mammalian immune system. These peptides may be used to distinguish  
 between the normal form of prion protein (PrPc) and the  
 scrapie-associated form (PrPsc). These peptides may include rare or  
 synthetic amino acids or a ratio- inverse peptide modification to improve  
 resistance to enzymatic degradation.

Sequence 22 AA:

Query Match 80.4%; Score 41; DB 14; Length 22;

Best Local Similarity 61.5%; Pred. No. 0.018;

Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTGYXXESXAY 13

Db 3 CITOYORESOAY 15



GenCore version 5.1.4-p5\_4578  
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# OM protein - protein search, using sw model

Run on: March 24, 2003, 17:22:16 ; Search time 16.25 Seconds  
(without alignments)  
76.908 Million cell updates/sec

Title: US-09-508-828B-3

Perfect score: 51

Sequence: 1 CXTQYXXESXAXY 13

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues

Total number of hits satisfying chosen parameters: 283224

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database : PIR\_73:\*  
1: PIR1:\*  
2: PIR2:\*  
3: PIR3:\*  
4: PIR4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	42	82.4	252	2	JC6175 prion protein - ra
2	42	82.4	254	1	UJHYIH major prion PrP-Sc
3	42	82.4	257	2	A23545 major prion PrP27-
4	41	80.4	226	2	A53892 prion-related prot
5	41	80.4	232	2	S71041 major prion protel
6	41	80.4	239	2	S53633 major prion protel
7	41	80.4	241	2	S71056 major prion protel
8	41	80.4	241	2	S71048 major prion protel
9	41	80.4	245	2	S53627 major prion protel
10	41	80.4	245	2	S71045 major prion protel
11	41	80.4	252	2	I61848 major prion protel
12	41	80.4	252	2	S53634 major prion protel
13	41	80.4	252	2	S53631 major prion protel
14	41	80.4	253	1	UJHU major prion protel
15	41	80.4	253	2	I37032 major prion protel
16	41	80.4	253	2	I61847 major prion protel
17	41	80.4	253	2	S53635 prion protein - sl
18	41	80.4	253	2	I84423 major prion protel
19	41	80.4	253	2	S53618 major prion protel
20	41	80.4	253	2	S53619 major prion protel
21	41	80.4	253	2	S53620 major prion protel
22	41	80.4	253	2	S71055 major prion protel
23	41	80.4	253	2	S53623 major prion protel
24	41	80.4	253	2	S53624 major prion protel
25	41	80.4	253	2	S53625 major prion protel
26	41	80.4	253	2	S53617 major prion protel
27	41	80.4	253	2	S53614 major prion protel
28	41	80.4	253	2	S53616 major prion protel
29	41	80.4	254	2	A34759 prion protein - Ch

30	41	80.4	254	2	B34759 prion protein - go
31	41	80.4	254	2	A23544 major prion protel
32	41	80.4	256	2	JU0268 major prion protel
33	41	80.4	256	2	S37149 prion protein - go
34	41	80.4	256	2	A54281 major prion protel
35	41	80.4	257	2	J01900 major prion protel
36	41	80.4	260	2	S53629 major prion protel
37	41	80.4	264	2	S37137 prion protein - gr
38	41	80.4	264	2	A54330 major prion protel
39	31	60.8	938	2	H53050 probable ferredoxi
40	30	58.8	339	2	JC7509 glycoprotein VI-1
41	30	58.8	499	2	D69735 xyulose kinase xy
42	30	58.8	738	2	S65169 hypothetical prote
43	29	56.9	392	2	I51422 glutamine syntheta
44	29	56.9	392	2	T19867 hypothetical prote
45	29	56.9	639	2	S23569 gag polypeptide ho

## ALIGNMENTS

### RESULT 1

JC6175

C:Species: Oryctolagus cuniculus (domestic rabbit)

C:Date: 11-Apr-1997 #sequence\_revision 09-May-1997 #text\_change 13-Aug-1999

C:Accession: JC6175

R:Loftus, B.; Rogers, M.

Gene 184, 215-219, 1997

A:Title: Characterization of a prion protein (PrP) gene from rabbit; a species with a

A:Reference number: JC6175; MUID:97183665; PMID:9031631

A:Accession: JC6175

A:Molecule type: DNA

A:Residues: 1-252 <LOF>

A:Cross-references: GB:U28334; NID:g1490412; PIDN:AA048697.1; PID:g1490413

A:Comment: This protein is a cellular protein. It is involved in the neurodegenerativ

C:Genetics:

A:Gene: PrP

C:Superfamily: major prion protein

C:Keywords: disulfide bond; prion

Query Match	82.4%	Score 42;	DB 2;	Length 252;
Best Local Similarity	61.5%	Pred. No. 0.021;		
Matches	8;	Conservative	0;	Mismatches 5;
			Indels	0;
			Gaps	0;
OY	1	CXTQYXXESXAXY	13	
DB	213	CITQYQESQANV	225	

### RESULT 2

UJHYIH

major prion PrP-Sc protein precursor - golden hamster

N:Contains: scrapie amyloid protein (PrP27-30)

C:Species: Mesocricetus auratus (golden hamster)

C:Date: 04-Dec-1986 #sequence\_revision 12-Apr-1996 #text\_change 28-Jan-2000

C:Accession: I48168; A03133; I48167; S02520; A36019; A40665

R:Basler, K.; Oesch, B.; Scott, M.G.; Westaway, D.; Waelchli, M.; Groth, D.F.; McKinl

Cell 46, 417-428, 1986

A:Title: Scrapie and cellular PrP isoforms are encoded by the same chromosomal gene.

A:Reference number: I48168; MUID:86272089; PMID:2873895

A:Accession: I48168

A:Molecule type: DNA

A:Residues: 1-254 <RES>

A:Cross-references: GB:M14054; NID:g191425; PIDN:AA37091.1; PID:g387076

R:Oesch, B.; Westaway, D.; Waelchli, M.; McKinley, M.P.; Kent, S.B.H.; Aebersold, R.;

Cell 40, 735-746, 1985

A:Title: A cellular gene encodes scrapie PrP 27-30 protein.

A:Reference number: A03133; MUID:85176927; PMID:2859120

A:Accession: A03133

A:Molecule type: mRNA

A:Residues: 15-254 <DES>

A:Cross-references: GB:K02234; NID:g191429; PIDN:AA37092.1; PID:g191430

A:Note: this mRNA, isolated from the brain of scrapie-infected hamster, is the product of the PrP<sup>Sc</sup> gene.  
 R:Stahl, N.; Baldwin, M.A.; Teplow, D.B.; Hood, L.; Gibson, B.W.; Burlingame, A.L.; Prus  
 Biochemistry 32, 1991-2002, 1993  
 A:Title: Structural studies of the scrapie prion protein using mass spectrometry and am  
 A:Reference number: A40665; MUID:93192259; PMID:8448158  
 A:Contents: Annotation: chemical (not conformational) identity of PrP<sup>Sc</sup> and PrP<sup>C</sup> molecu  
 A:Note: no chemical difference between cellular (PrP<sup>C</sup>) and scrapie (PrP<sup>Sc</sup>) forms of this  
 R:McKinley, M.P.; Prusiner, S.B.  
 Int. Rev. Neurobiol. 28, 1-57, 1986  
 A:Title: Biology and structure of scrapie prions.  
 A:Reference number: 148167; MUID:87108309; PMID:3100471  
 A:Accession: 148167  
 A:Status: preliminary; translated from GB/EMBL/DBJ  
 A:Molecule type: mRNA  
 A:Residues: 12-254 <RE2>  
 A:Cross-references: GB:M37381; MUID:9191422; PIDN:AAA37090.1; PID:9191423  
 R:Turk, E.; Teplow, D.B.; Hood, L.E.; Prusiner, S.B.  
 Eur. J. Biochem. 176, 21-30, 1988  
 A:Title: Purification and properties of the cellular and scrapie hamster prion proteins.  
 A:Reference number: 502519; MUID:88329062; PMID:318115  
 A:Accession: 502520  
 A:Molecule type: protein  
 A:Residues: 23-24, 'X', 26-36, 'X', 38-55 <TUR>  
 A:Experimental source: strain 126-3K  
 C:Comment: Scrapie amyloid protein PrP<sup>27-30</sup> is a strongly aggregating, amyloid fibril-fc  
 C:Genetics:  
 A:Introns: #status absent  
 A:Note: an intron is found 5' to the coding region  
 C:Superfamily: major prion protein  
 F:1-22/Domains: signal sequence #status predicted <SIG>  
 F:23-231/Product: major prion PrP<sup>27-30</sup> protein #status experimental <MAT>  
 F:232-254/Domains: carboxyl-terminal propeptide #status predicted <CPP>  
 F:181,197/Binding site: carbohydrate (Asn) (covalent) #status experimental  
 F:231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form  
 Query Match 82.4%; Score 42; DB 1; Length 254;  
 Best Local Similarity 61.5%; Pred. No. 0.021;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 OY 1 CXTQYXXESXAXY 13  
 DB 214 CTTQYOKESQAYY 226

RESULT 3  
 A23545  
 major prion PrP<sup>27-30</sup> protein - hamster  
 C:Species: Crictetinae gen. sp. (hamster)  
 C:Date: 29-Aug-1987 #sequence\_revision 29-Aug-1987 #text\_change 18-Jun-1993  
 C:Accession: A23545  
 R:Robak, N.K.; Sawh, P.R.; Wolfe, G.C.; Rubenstein, R.; Carp, R.I.; Innis, M.A.  
 Proc. Natl. Acad. Sci. U.S.A. 83, 6377-6381, 1986  
 A:Title: Isolation of a cDNA clone encoding the leader peptide of prion protein and expr  
 A:Reference number: A23545; MUID:86313584; PMID:3529083  
 A:Accession: A23545  
 A:Molecule type: protein  
 A:Residues: 1-257 <ROB>  
 C:Superfamily: major prion protein  
 Query Match 82.4%; Score 42; DB 2; Length 257;  
 Best Local Similarity 61.5%; Pred. No. 0.021;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 OY 1 CXTQYXXESXAXY 13

DB 217 CTTQYOKESQAYY 229

RESULT 4  
 A53892  
 prion-related protein - rat (fragment)  
 C:Species: Rattus norvegicus (Norway rat)  
 C:Date: 07-Oct-1994 #sequence\_revision 07-Oct-1994 #text\_change 13-Aug-1999  
 C:Accession: A53892  
 R:Jiao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.  
 Lab. Invest. 57, 370-374, 1987  
 A:Title: Cloning of rat "prion-related protein" cDNA.  
 A:Reference number: A53892; MUID:88037055; PMID:2889848  
 A:Accession: A53892  
 A:Status: preliminary  
 A:Molecule type: mRNA  
 A:Residues: 1-226 <LIA>  
 A:Cross-references: GB:M20313; MUID:9206391; PIDN:AAA41947.1; PID:9206392  
 C:Superfamily: major prion protein  
 Query Match 80.4%; Score 41; DB 2; Length 226;  
 Best Local Similarity 61.5%; Pred. No. 0.033;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 OY 1 CXTQYXXESXAXY 13  
 DB 186 CTTQYOKESQAYY 198

RESULT 5  
 S71041  
 major prion protein - black-handed spider monkey (fragment)  
 C:Species: Ateles geoffroyi (black-handed spider monkey)  
 C:Date: 27-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 13-Aug-1999  
 C:Accession: S71041; S53630  
 R:Schatz, H.M.  
 submitted to the EMBL Data Library, April 1994  
 A:Reference number: S71041  
 A:Accession: S71041  
 A:Molecule type: DNA  
 A:Residues: 1-232 <SCH>  
 A:Cross-references: EMBL:U08309; MUID:9474376; PIDN:AAC50097.1; PID:9474377  
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 J. Mol. Biol. 245, 362-374, 1995  
 A:Title: Prion protein gene variation among primates.  
 A:Reference number: S53614; MUID:95139066; PMID:7837269  
 A:Accession: S53630  
 A:Status: nucleic acid sequence not shown  
 A:Molecule type: DNA  
 A:Residues: 1-194, 'R', 196-231 <SCW>  
 A:Cross-references: EMBL:U08309  
 C:Superfamily: major prion protein  
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane  
 Query Match 80.4%; Score 41; DB 2; Length 232;  
 Best Local Similarity 61.5%; Pred. No. 0.033;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 OY 1 CXTQYXXESXAXY 13  
 DB 198 CTTQYOKESQAYY 210

RESULT 6  
 S53633  
 major prion protein - douroucoul (fragment)  
 C:Species: Aotus trivirgatus (douroucoul, night monkey, owl monkey)  
 C:Date: 28-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 13-Aug-1999  
 C:Accession: S53633; S71042  
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 J. Mol. Biol. 245, 362-374, 1995  
 A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269  
A:Accession: S53633  
A:Status: nucleic acid sequence not shown  
A:Molecule type: DNA  
A:Residues: 1-239 <SCH>  
A:Cross-references: EMBL:U08293  
R:Schatz, H.M.  
Submitted to the EMBL Data Library, April 1994  
A:Reference number: S71041  
A:Accession: S71042  
A:Molecule type: DNA  
A:Residues: 1-202, 'E', 204-239 <SCW>  
A:Cross-references: EMBL:U08293; NID:9474344; PIDN:ANCS0082.1; PID:9474345  
C:Superfamily: major prion protein  
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane protein

Query Match 80.4%; Score 41; DB 2; Length 239;  
Best Local Similarity 61.5%; Pred. No. 0.034;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13  
DB 206 CTTQYKESQAYY 218

RESULT 7  
Major prion protein - mandrill (fragment)  
C:Species: Papio sphinx, Mandrillus sphinx (mandrill)  
C>Date: 27-Oct-1996 #sequence\_revision 14-Feb-1997 #text\_change 13-Aug-1999  
C:Accession: S71056; S53621  
R:Schatz, H.M.  
Submitted to the EMBL Data Library, April 1994  
A:Reference number: S71041  
A:Accession: S71056  
A:Molecule type: DNA  
A:Residues: 1-241 <SCH>  
A:Cross-references: EMBL:U08303; NID:9474364; PIDN:ANCS0091.1; PID:9474365  
R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
J. Mol. Biol. 245, 362-374, 1995  
A:Title: Prion protein gene variation among primates.  
A:Reference number: S53614; MUID:95139066; PMID:7837269  
A:Accession: S53621  
A:Status: nucleic acid sequence not shown  
A:Molecule type: DNA  
A:Residues: 1-203, 'R', 205-240 <SCW>  
A:Cross-references: EMBL:U08303  
C:Superfamily: major prion protein  
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane protein

Query Match 80.4%; Score 41; DB 2; Length 241;  
Best Local Similarity 61.5%; Pred. No. 0.035;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13  
DB 207 CTTQYKESQAYY 219

RESULT 8  
Major prion protein - Callithecus moloch (fragment)  
C:Species: Callithecus moloch  
C>Date: 27-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 13-Aug-1999  
C:Accession: S71048; S53632  
R:Schatz, H.M.  
Submitted to the EMBL Data Library, April 1994  
A:Reference number: S71041  
A:Accession: S71048  
A:Molecule type: DNA  
A:Residues: 1-241 <SCH>  
A:Cross-references: EMBL:U08312; NID:9475585; PIDN:ANCS0100.1; PID:9475586  
R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995  
A:Title: Prion protein gene variation among primates.  
A:Reference number: S53614; MUID:95139066; PMID:7837269  
A:Accession: S53632  
A:Status: nucleic acid sequence not shown  
A:Molecule type: DNA  
A:Residues: 1-203, 'R', 205-240 <SCW>  
A:Cross-references: EMBL:U08312  
C:Superfamily: major prion protein  
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane protein

Query Match 80.4%; Score 41; DB 2; Length 241;  
Best Local Similarity 61.5%; Pred. No. 0.035;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13  
DB 207 CTTQYKESQAYY 219

RESULT 9  
Major prion protein - green monkey  
C:Species: Cercopithecus aethiops (green monkey, grivet)  
C>Date: 28-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 13-Aug-1999  
C:Accession: S53627; S71043  
R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
J. Mol. Biol. 245, 362-374, 1995  
A:Title: Prion protein gene variation among primates.  
A:Reference number: S53614; MUID:95139066; PMID:7837269  
A:Accession: S53627  
A:Status: nucleic acid sequence not shown  
A:Molecule type: DNA  
A:Residues: 1-245 <SCH>  
A:Cross-references: EMBL:U08291  
R:Schatz, H.M.  
Submitted to the EMBL Data Library, April 1994  
A:Reference number: S71041  
A:Accession: S71043  
A:Molecule type: DNA  
A:Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>  
A:Cross-references: EMBL:U08291; NID:9474340; PIDN:ANCS0080.1; PID:9474341  
C:Superfamily: major prion protein  
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane protein

Query Match 80.4%; Score 41; DB 2; Length 245;  
Best Local Similarity 61.5%; Pred. No. 0.035;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13  
DB 206 CTTQYKESQAYY 218

RESULT 10  
Major prion protein - Cercopithecus diana  
C:Species: Cercopithecus diana  
C>Date: 14-Feb-1997 #sequence\_revision 14-Feb-1997 #text\_change 13-Aug-1999  
C:Accession: S71045; S53628  
R:Schatz, H.M.  
Submitted to the EMBL Data Library, April 1994  
A:Reference number: S71041  
A:Accession: S71045  
A:Molecule type: DNA  
A:Residues: 1-245 <SCH>  
A:Cross-references: EMBL:U08292; NID:9474342; PIDN:ANCS0081.1; PID:9474343  
R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
J. Mol. Biol. 245, 362-374, 1995  
A:Title: Prion protein gene variation among primates.  
A:Reference number: S53614; MUID:95139066; PMID:7837269  
A:Accession: S53628  
A:Status: nucleic acid sequence not shown

A:Molecule type: DNA  
 A:Residues: 8-10,'L',12-202,'R',204-239 <SCW>  
 A:Cross-references: EMBL:U08292  
 C:Superfamily: major prion protein  
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane protein

Query Match 80.4%; Score 41; DB 2; Length 245;  
 Best Local Similarity 61.5%; Pred. No. 0.035;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13  
 |||||  
 DB 206 CITOYERESQAY 218

## RESULT 11

major prion protein precursor - common squirrel monkey  
 C:Species: Saimiri sciureus (common squirrel monkey)  
 C>Date: 31-May-1996 #sequence\_revision 31-May-1996 #text\_change 13-Aug-1999  
 C:Accession: 161848  
 R:Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D  
 Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994  
 A:Title: Infectious amyloid precursor gene sequences in primates used for experimental  
 A:Reference number: 136907; MUID:95083661; PMID:7991600  
 A:Accession: 161848  
 A:Status: preliminary; translated from GB/EMBL/DBJ  
 A:Molecule type: DNA  
 A:Residues: 1-252 <RES>  
 A:Cross-references: EMBL:U15165; NID:g595852; PIDN:AAA68636.1; PID:g595853  
 C:Superfamily: major prion protein

Query Match 80.4%; Score 41; DB 2; Length 252;  
 Best Local Similarity 61.5%; Pred. No. 0.036;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13  
 |||||  
 DB 213 CITOYERESQAY 225

RESULT 12  
 S53634  
 major prion protein - common marmoset  
 C:Species: Callithrix jacchus (common marmoset)  
 C>Date: 28-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 13-Aug-1999  
 C:Accession: S53634; S71047  
 R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 J. Mol. Biol. 245, 362-374, 1995  
 A:Title: Prion protein gene variation among primates.  
 A:Reference number: S53614; MUID:95139066; PMID:7837269  
 A:Accession: S53634  
 A:Status: nucleic acid sequence not shown  
 A:Molecule type: DNA  
 A:Residues: 1-252 <SCH>  
 A:Cross-references: EMBL:U08304  
 R:Schaetzl, H.M.  
 submitted to the EMBL Data Library, April 1994  
 A:Reference number: S71041  
 A:Accession: S71047  
 A:Molecule type: DNA  
 A:Residues: 1-209,'E',211-252 <SCW>  
 A:Cross-references: EMBL:U08304; NID:9474366; PIDN:AAC50092.1; PID:9474367  
 C:Superfamily: major prion protein  
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane protein

Query Match 80.4%; Score 41; DB 2; Length 252;  
 Best Local Similarity 61.5%; Pred. No. 0.036;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13  
 |||||  
 DB 213 CITOYERESQAY 225

## RESULT 13

major prion protein - brown capuchin  
 C:Species: Cebus apella (brown capuchin, black-capped capuchin)  
 C>Date: 28-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 13-Aug-1999  
 C:Accession: S53631; S71044  
 R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 J. Mol. Biol. 245, 362-374, 1995  
 A:Title: Prion protein gene variation among primates.  
 A:Reference number: S53614; MUID:95139066; PMID:7837269  
 A:Accession: S53631  
 A:Status: nucleic acid sequence not shown  
 A:Molecule type: DNA  
 A:Residues: 1-252 <SCH>  
 A:Cross-references: EMBL:U08295  
 R:Schaetzl, H.M.  
 submitted to the EMBL Data Library, April 1994  
 A:Reference number: S71041  
 A:Accession: S71044  
 A:Molecule type: DNA  
 A:Residues: 1-209,'E',211-252 <SCW>  
 A:Cross-references: EMBL:U08295; NID:9474348; PIDN:AAC50084.1; PID:9474349  
 A:Superfamily: major prion protein  
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane

Query Match 80.4%; Score 41; DB 2; Length 252;  
 Best Local Similarity 61.5%; Pred. No. 0.036;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13  
 |||||  
 DB 213 CITOYERESQAY 225

## RESULT 14

major prion protein precursor - human  
 N:Alternate names: 11k amyloid protein; 27-30k statoglycoprotein; PrP 27-30; PrP 33-3  
 C:Species: Homo sapiens (man)  
 C>Date: 25-Oct-1987 #sequence\_revision 12-Apr-1996 #text\_change 16-Jun-2000  
 C:Accession: A24173; A40372; S14078; I54322; I68597; I59184; I79633;  
 R:Kretzschmar, H.A.; Stowring, L.E.; Westaway, D.; Stubblefield, W.H.; Prusiner, S.B.;  
 D.N.A. 5, 315-324, 1986  
 A:Title: Molecular cloning of a human prion protein cDNA.  
 A:Reference number: A24173; MUID:86300093; PMID:3755672  
 A:Accession: A24173  
 A:Molecule type: mRNA  
 A:Residues: 1-253 <RES>  
 A:Cross-references: GB:M13899; NID:9190467; PIDN:AAA60182.1; PID:9190468  
 R:Puckett, C.; Concannon, P.; Casey, C.; Hood, L.  
 Am. J. Hum. Genet. 49, 320-329, 1991  
 A:Title: Genomic structure of the human prion protein gene.  
 A:Reference number: A40372; MUID:91328137; PMID:1678248  
 A:Accession: A40372  
 A:Status: not compared with conceptual translation  
 A:Molecule type: DNA  
 A:Residues: 1-80,89-253 <PIC>  
 A:Cross-references: GB:X83416; NID:9747846; PIDN:CAA58442.1; PID:9747847  
 A:Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could n  
 R:Liiao, Y.C.; Lebo, R.V.; Clawson, G.A.; Smuckler, E.A.  
 Science 233, 364-367, 1986  
 A:Reference number: A05017; MUID:86261778; PMID:3014653  
 A:Accession: A05017  
 A:Molecule type: mRNA  
 A:Residues: 8-117,119-253 <LIA>  
 A:Cross-references: GB:D00015; NID:9220015; PIDN:BA00011.1; PID:9220016; GB:M13667;  
 R:Tagliavini, F.; Prelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Far  
 EMO J. 10, 513-519, 1991  
 A:Title: Amyloid protein of Gerstmann-Strauszler-scheinker disease (Indiana kindred)  
 A:Reference number: S14078; MUID:91160504; PMID:1672107  
 A:Accession: S14078





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OW protein - protein search, using sw model

Run on: March 24, 2003, 17:17:23 ; Search time 7.85417 Seconds  
(Without alignments)  
68.650 Million cell updates/sec

Title: US-09-508-828b-3  
Perfect score: 51  
Sequence: 1 CXTQYXXESXAXY 13

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues  
Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : SwissProt\_40.\*

Pred. NO. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Length	ID	Description
1	42	82.4	PRIO_RABIT	095211 oryctolagus
2	42	82.4	PRIO_MESAU	P04273 mesocricetu
3	41	80.4	PRIO_ATEGE	P40246 ateleus geof
4	41	80.4	PRIO_CERAT	Q95145 cercocobus
5	41	80.4	PRIO_ATEGE	Q95170 theropithec
6	41	80.4	PRIO_AOTTR	P40245 aotus trivi
7	41	80.4	PRIO_CALMO	P40248 callicebus
8	41	80.4	PRIO_MANSP	P40255 mandrillus
9	41	80.4	PRIO_CERAE	P40250 cercopithec
10	41	80.4	PRIO_CERMO	Q95172 cercopithec
11	41	80.4	PRIO_CERPA	Q95174 cercopithec
12	41	80.4	PRIO_CERCO	Q95176 cercocobus
13	41	80.4	PRIO_ATEPA	P51446 ateleus pant
14	41	80.4	PRIO_CALJA	P40247 callitrich
15	41	80.4	PRIO_CEBAP	P40249 cebus apell
16	41	80.4	PRIO_COLCU	P40251 colobus gue
17	41	80.4	PRIO_GORGO	P40252 gorilla gor
18	41	80.4	PRIO_HUMAN	P04156 homo sapien
19	41	80.4	PRIO_MACFA	P40254 macaca fasc
20	41	80.4	PRIO_PANTR	P40253 pan troglod
21	41	80.4	PRIO_PONRY	P40256 pongo pygma
22	41	80.4	PRIO_PREFR	P40257 presbytis f
23	41	80.4	PRIO_CRIGR	Q60506 cricetus
24	41	80.4	PRIO_CRIMI	Q60468 cricetus
25	41	80.4	PRIO_MOUSE	P04925 mus musculu
26	41	80.4	PRIO_RAT	P13652 rattus norv
27	41	80.4	PRIO_SIGHI	Q92013 sigmodon bl
28	41	80.4	PRIO_CANPA	O46501 canis famli
29	41	80.4	PRIO_CAPHI	P52143 capra hircu
30	41	80.4	PRIO_CEREL	P79142 cervus elap
31	41	80.4	PRIO_FELCA	O18754 felis silve
32	41	80.4	PRIO_ODOHE	P47852 odocolleus
33	41	80.4	PRIO_SHEEP	P23307 ovis aries

34	41	80.4	PRP2_BOVIN	Q01880 bos taurus
35	41	80.4	PRP2_TRAST	P40243 tragelaphus
36	41	80.4	PRIO_MUSPF	P52114 mustela put
37	41	80.4	PRIO_MUSVI	P40244 mustela vis
38	41	80.4	PRIO_SAIASC	P40258 saimiri sci
39	41	80.4	PRIO_BOVIN	P10279 bos taurus
40	41	80.4	PRP1_TRAST	P40242 tragelaphus
41	36	70.6	PRIO_CAMDR	P79141 camelus dro
42	30	58.8	PRIO_TRIUV	P51780 trichosurus
43	30	58.8	XYLB_BACSU	P39211 bacillus su
44	30	58.8	YPS8_YEAST	Q99299 saccharomyc
45	29	56.9	PRIO_PIG	P49927 sus scrofa

## ALIGNMENTS

RESULT 1	ID	PRIO_RABIT	STANDARD	PRT	252 AA.
AC	095211				
DT	01-NOV-1997	(Rel. 35, Created)			
DT	01-NOV-1997	(Rel. 35, Last sequence update)			
DT	01-NOV-1997	(Rel. 35, Last annotation update)			
DE	Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).				
GN	PRNP OR PRP.				
OS	Oryctolagus cuniculus (Rabbit).				
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;				
OC	Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.				
OX	NCBI_TaxID-9986;				
RN	[1]				
RP	SEQUENCE FROM N.A.				
RC	STRAIN-New Zealand white;				
RX	MEDLINE-9718365; PubMed-9031631;				
RA	Loftus B., Rogers M.;				
RT	"Characterization of a prion protein (Prp) gene from rabbit; a				
RL	species with apparent resistance to infection by prions.";				
CC	Gene 184:215-219(1997).				
CC	-1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE				
CC	HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.				
CC	-1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED				
CC	"RODS".				
CC	-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.				
CC	-1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND				
CC	ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,				
CC	CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME				
CC	(GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),				
CC	TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.				
CC	-1- SIMILARITY: BELONGS TO THE PRION FAMILY.				
CC	-----				
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CC	use by non-profit institutions as long as its content is in no way				
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CC	entities requires a license agreement (see <a href="http://www.isb-sib.ch/announce/">http://www.isb-sib.ch/announce/</a>				
CC	or send an email to <a href="mailto:license@sib-sib.ch">license@sib-sib.ch</a> ).				
CC	-----				
DR	EMBL: U28334; AAC48697.1; .				
DR	HSSP: P10279; IDMY.				
DR	InterPro: IPR000817; Prion.				
DR	Pfam: PF00377; Prion.1.				
DR	PRINTS: PR00341; PRION.				
DR	SMART: SM00157; PRP.1.				
DR	PROSITE: PS00291; PRION.1; 1.				
DR	PROSITE: PS00706; PRION.2; 1.				
KW	Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.				
FT	SIGNAL	1	28	POTENTIAL.	
FT	CHAIN	29	252	MAJOR PRION PROTEIN.	
FT	CARBOHYD	180	180	N-LINKED (GLCNAc. . .) (POTENTIAL).	
FT	CARBOHYD	196	196	N-LINKED (GLCNAc. . .) (POTENTIAL).	
FT	DISULFID	178	213	BY SIMILARITY.	
FT	DOMAIN	51	92	5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-	

FT FT REPEAT 51 59 0.  
 RN REPEAT 60 67 1.  
 FT REPEAT 68 75 2.  
 RN REPEAT 76 83 3.  
 FT REPEAT 84 92 4.  
 RN REPEAT 84 92 5.  
 SO SEQUENCE 252 AA: 27432 KM: 2E177AAE38B23A54 CRC64;  
 Query Match 82.4%; Score 42; DB 1; Length 252;  
 Best Local Similarity 61.5%; Pred. No. 0.0067;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 DB 213 CITOYXOESQAY 225  
 1 CTOYXXESKXAY 13  
 |||||  
 ID PRIOR\_MESAU STANDARD; PRT; 254 AA.  
 AC P04273;  
 DT 20-MAR-1987 (Rel. 04, Created)  
 DT 01-JAN-1988 (Rel. 06, Last sequence update)  
 DT 15-DEC-1998 (Rel. 37, Last annotation update)  
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).  
 OS Mesocricetus auratus (Golden hamster).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;  
 OC Mesocricetus.  
 NCBI\_TaxID=10036;  
 [1]  
 RN SEQUENCE FROM N.A.  
 RP MEDLINE=86272089; PubMed=2873895;  
 RA Basler K., Oesch B., Scott M., Westaway D., Waelchli M., Groth D.F.,  
 RA McKinley M.P., Prusiner S.B., Weissmann C.;  
 RT "Scrapie and cellular PrP isoforms are encoded by the same  
 RT chromosomal gene.";  
 RL Cell 46:417-428(1986).  
 [2]  
 RN SEQUENCE OF 15-254 FROM N.A.  
 RP MEDLINE=85176927; PubMed=2859120;  
 RA Oesch B., Westaway D., Waelchli M., McKinley M.P., Kent S.B.H.,  
 RA Aebersold R., Barry R.A., Tempst P., Tempst D.B., Hood L.E.,  
 RA Prusiner S.B., Weissmann C.;  
 RT "A cellular gene encodes scrapie PrP 27-30 protein.";  
 RL Cell 40:735-746(1985).  
 [3]  
 RN CARBOHYDRATE-LINKAGE SITES, AND DISULFIDE BONDS.  
 RP MEDLINE=88329062; PubMed=3138115;  
 RA Turk E., Teplov D.B., Hood L.E., Prusiner S.B.;  
 RT "Purification and properties of the cellular and scrapie hamster  
 RT prion proteins.";  
 RL Eur. J. Biochem. 176:21-30(1988).  
 [4]  
 RN GPI-ANCHOR.  
 RP MEDLINE=88027007; PubMed=2444340;  
 RA Stahl N., Borchelt D.R., Hasiao K., Prusiner S.B.;  
 RT "Scrapie prion protein contains a phosphatidylinositol glycolipid.";  
 RL Cell 51:229-240(1987).  
 [5]  
 RN GPI-ANCHOR.  
 RP MEDLINE=91104789; PubMed=1980209;  
 RA Stahl N., Baldwin M.A., Burlingame A.L., Prusiner S.B.;  
 RT "Identification of glycolipid-linked and truncated  
 RT forms of the scrapie prion protein.";  
 RL Biochemistry 29:8879-8884(1990).  
 [6]  
 RN MUTAGENESIS OF CARBOHYDRATE-LINKAGE SITES.  
 RP MEDLINE=92369621; PubMed=1983782;  
 RA Rogers M., Taraboulos A., Scott M., Groth D., Prusiner S.B.;  
 RT "Intracellular accumulation of the cellular prion protein after  
 RT mutagenesis of its Asn-linked glycosylation sites.";

RL Glycobiology 1:101-109(1990).  
 [7]  
 RN STRUCTURE BY NMR OF 90-231.  
 RP MEDLINE=97439821; PubMed=9294167;  
 RA James T.L., Liu H., Ulyanov N.B., Farr-Jones S., Zhang H.,  
 RA Donne D.G., Kaneko K., Groth D., Mehlhorn I., Prusiner S.B.,  
 RA Cohen F.E.;  
 RT "Solution structure of a 142-residue recombinant prion protein  
 RT corresponding to the infectious fragment of the scrapie isoform.";  
 RL Proc. Natl. Acad. Sci. U.S.A. 94:10086-10091(1997).  
 [8]  
 RN STRUCTURE BY NMR OF 29-231.  
 RP MEDLINE=98054254; PubMed=9391046;  
 RA Donne D.G., Viles J.H., Groth D., Mehlhorn I., James T.L., Cohen F.E.,  
 RA Prusiner S.B., Wright P.E., Dyson H.U.;  
 RT "Structure of the recombinant full-length hamster prion protein  
 RT PrP(29-231): the N terminus is highly flexible.";  
 RL Proc. Natl. Acad. Sci. U.S.A. 94:13452-13457(1997).  
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
 CC "RODS".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS  
 CC INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU,  
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
 CC -----  
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 CC -----  
 DR EMBL: K02234; AAA37092.1; -;  
 DR EMBL: M14054; AAA37091.1; -;  
 DR PIR: A03133; UJHYH.  
 DR PDB: 1B10; 02-DEC-98.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion; 1.  
 DR PRINTS: PR00341; PRION.  
 DR SMART: SM00157; PrP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal; 3D-structure.  
 FT SIGNAL 1 22  
 FT CHAIN 23 231  
 FT PROPEP 232 254  
 FT LIPID 231 231  
 FT DOMAIN 90 231  
 FT CARBOHYD 181 181  
 FT CARBOHYD 197 197  
 FT DISULFID 179 214  
 FT DOMAIN 51 91  
 FT REPEAT 51 59  
 FT REPEAT 60 67  
 FT REPEAT 68 75  
 FT REPEAT 76 83  
 FT REPEAT 84 91  
 FT MUTAGEN 183 183  
 FT MUTAGEN 199 199  
 SO SEQUENCE 254 AA: 27919 KM: 442C0E3BD4D20672 CRC64;  
 Query Match 82.4%; Score 42; DB 1; Length 254;  
 Best Local Similarity 61.5%; Pred. No. 0.0067;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 1 CTOYXXESKXAY 13



Db 214 CTOYKESQAYY 226

```

RESULT 3
PRT:
ID PRT: ATEGE STANDARD; PRT: 232 AA.
AC P40246;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 01-OCT-1996 (Rel. 34, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN PrP.
OS Ateles Geoffroyi (Black-handed spider monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateleinae; Ateles.
OC NCBI_TaxID=9509;
RN [1]
RP MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Decosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
CC "RODS".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
CC -----
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CC -----
CC EMBL: U08309; AAC50097.1; -
CC DR HSSP: P04156; 1E1G.
CC DR InterPro: IPR000817; Prion.
CC Pfam: PF00377; prion; 1.
CC SMART: SM00157; PrP; 1.
CC DR PROSITE: PS00291; PRION_1; 1.
CC DR PROSITE: PS00706; PRION_2; 1.
CC KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
CC FT NON_TER 1 1
CC FT SIGNAL <1 15 BY SIMILARITY.
CC FT CHAIN 16 214 MAJOR PRION PROTEIN.
CC FT PROPEP 215 >232 REMOVED IN MATURE FORM (BY SIMILARITY).
CC FT LIPID 214 214 GPI-ANCHOR (BY SIMILARITY).
CC FT DISULFID 163 198 BY SIMILARITY.
CC FT CARBOHYD 165 165 N-LINKED (GLCNAC. . .) (POTENTIAL).
CC FT CARBOHYD 181 181 N-LINKED (GLCNAC. . .) (POTENTIAL).
CC FT CARBOHYD 44 84 4 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
CC FT DOMAIN 44 84
CC FT REPEAT 44 51
CC FT REPEAT 52 59 1.
CC FT REPEAT 60 67 2.
CC FT REPEAT 68 75 3.
CC FT REPEAT 76 76 4.
CC FT NON_TER 232 232
CC SQ SEQUENCE 232 AA: 25596 MW: 0E2D75F04C050C4A CRC64;
Query Match 80.4%; Score 41; DB 1; Length 232;
Best Local Similarity 61.5%; Pred. No. 0.011;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
OY 1 CTOYKESQAYY 13

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Db 198 CTOYKESQAYY 210

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RESULT 4
PRT:
ID PRT: CERAT STANDARD; PRT: 238 AA.
AC Q95145; Q95200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN PrP.
OS Cercopithecus aethiops, and
OS Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OC NCBI_TaxID=36222, 9546;
RN [1]
RP SEQUENCE FROM N.A.
RA der Kuyil A.C., Dekker J.T., Goudsmit J.;
RT Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
RL
CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
CC "RODS".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
CC -----
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CC or send an email to license@sib-sib.ch).
CC -----
CC EMBL: U75384; AAB50623.1; -
CC DR EMBL: U75382; AAB50629.1; -
CC DR HSSP: P04925; 1AG2.
CC DR InterPro: IPR000817; Prion.
CC Pfam: PF00377; prion; 1.
CC SMART: SM00157; PrP; 1.
CC DR PROSITE: PS00291; PRION_1; 1.
CC DR PROSITE: PS00706; PRION_2; 1.
CC KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
CC FT NON_TER 1 1
CC FT SIGNAL <1 15 BY SIMILARITY.
CC FT CHAIN 16 215 MAJOR PRION PROTEIN.
CC FT PROPEP 216 238 REMOVED IN MATURE FORM (BY SIMILARITY).
CC FT LIPID 215 215 GPI-ANCHOR (BY SIMILARITY).
CC FT DISULFID 164 199 BY SIMILARITY.
CC FT CARBOHYD 166 166 N-LINKED (GLCNAC. . .) (POTENTIAL).
CC FT CARBOHYD 182 182 N-LINKED (GLCNAC. . .) (POTENTIAL).
CC FT CARBOHYD 44 76 4 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
CC FT DOMAIN 44 76
CC FT REPEAT 44 52
CC FT REPEAT 53 60 1.
CC FT REPEAT 61 68 2.
CC FT REPEAT 69 76 3.
CC FT REPEAT 76 76 4.
CC FT NON_TER 238 AA: 26123 MW: 5F59A3BEC3E3531B CRC64;
Query Match 80.4%; Score 41; DB 1; Length 238;
Best Local Similarity 61.5%; Pred. No. 0.011;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
OY 1 CTOYKESQAYY 13

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Db 199 CITORYEKESQAVY 211

RESULT 5  
PRIO\_THEGE STANDARD: PRT: 238 AA.  
AC Q95270;  
DT 01-NOV-1997 (Rel. 35, Created)  
DT 01-NOV-1997 (Rel. 35, Last sequence update)  
DT 01-NOV-1997 (Rel. 35, Last annotation update)  
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).  
GN PRNP OR PRP.  
OS Theropithecus gelada (Gelada baboon).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
OC Cercopithecinae; Theropithecus.  
RN NCBI\_Taxid=9565;  
RX [1]  
RP SEQUENCE FROM N.A.  
RA der Kuyil A.C., Dekker J.T., Goudsmit J.;  
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.  
CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
CC "RODS".  
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME  
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
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CC  
CC EMBL: U75383; AAB50630.1; -  
CC DR HSSP: P04925; IAG2.  
CC DR InterPro: IPR000817; Prion.  
CC DR Pfam: PF00377; prion; 1.  
CC DR SMART: SM00157; PRP; 1.  
CC DR PROSITE: PS00291; PRION\_1; 1.  
CC DR PROSITE: PS00706; PRION\_2; 1.  
CC KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
CC FT NON\_TER 1  
CC FT SIGNAL <1 15 BY SIMILARITY.  
CC FT CHAIN 16 >238 MAJOR PRION PROTEIN.  
CC FT DISULFID 164 199 BY SIMILARITY.  
CC FT CARBOHYD 166 166 N-LINKED (GLCNAc. . .) (POTENTIAL).  
CC FT CARBOHYD 182 182 N-LINKED (GLCNAc. . .) (POTENTIAL).  
CC FT DOMAIN 44 83 4 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-  
CC FT REPEAT 44 52 0.  
CC FT REPEAT 53 52 1.  
CC FT REPEAT 53 60 2.  
CC FT REPEAT 61 68 3.  
CC FT REPEAT 69 76 4.  
CC FT NON\_TER 238 238  
CC FT SEQUENCE 238 AA; 26104 MW; 5F59BFF602243EDB CRC64;  
Query Match 80.4%; Score 41; DB 1; Length 238;  
Best Local Similarity 61.5%; Pred. No. 0.011;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

RESULT 6  
PRIO\_AOTTR STANDARD: PRT: 239 AA.  
AC P40245;  
DT 01-FEB-1995 (Rel. 31, Created)  
DT 01-FEB-1995 (Rel. 31, Last sequence update)  
DT 01-NOV-1995 (Rel. 32, Last annotation update)  
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).  
GN PRNP.  
OS Aotus trivirgatus (Night monkey) (Douroucoulli).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Aotinae; Aotus.  
RN NCBI\_Taxid=9505;  
RX [1]  
RP SEQUENCE FROM N.A.  
RA MEDLINE-95139066; PubMed-7837269;  
RA Schatzl H.M., Dacosta M., Taylor L., Prusiner S.B.;  
RT "Prion protein gene variation among primates".  
RL J. Mol. Biol. 245:362-374(1995).  
CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
CC "RODS".  
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME  
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
CC  
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CC or send an email to [license@isb-sib.ch](mailto:license@isb-sib.ch)).  
CC  
CC EMBL: U08293; AAC50082.1; -  
CC DR HSSP: P04925; IAG2.  
CC DR InterPro: IPR000817; Prion.  
CC DR Pfam: PF00377; prion; 1.  
CC DR SMART: SM00157; PRP; 1.  
CC DR PROSITE: PS00291; PRION\_1; 1.  
CC DR PROSITE: PS00706; PRION\_2; 1.  
CC KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
CC FT NON\_TER 1  
CC FT SIGNAL <1 15 BY SIMILARITY.  
CC FT CHAIN 16 >239 MAJOR PRION PROTEIN.  
CC FT DISULFID 171 206 BY SIMILARITY.  
CC FT CARBOHYD 173 173 N-LINKED (GLCNAc. . .) (POTENTIAL).  
CC FT CARBOHYD 189 189 N-LINKED (GLCNAc. . .) (POTENTIAL).  
CC FT DOMAIN 44 83 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-  
CC FT REPEAT 44 51 0.  
CC FT REPEAT 52 59 1.  
CC FT REPEAT 52 59 2.  
CC FT REPEAT 60 67 3.  
CC FT REPEAT 68 75 4.  
CC FT REPEAT 76 83 5.  
CC FT NON\_TER 239 239  
CC FT SEQUENCE 239 AA; 26246 MW; 2EFB77E354B7024A CRC64;  
Query Match 80.4%; Score 41; DB 1; Length 239;  
Best Local Similarity 61.5%; Pred. No. 0.011;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

## RESULT 7

PRIO\_CALMO STANDARD: PRT: 241 AA.

AC P40248;

DT 01-FEB-1995 (Rel. 31, Created)

DT 01-FEB-1995 (Rel. 31, Last sequence update)

DT 01-NOV-1995 (Rel. 32, Last annotation update)

DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).

GN PrNP.

OS Calliebus moloch (Dusky titl.).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Calliebedinae; Calliebedus.

OC NCBI\_TaxID=9523;

OX NCBI\_TaxID=9523;

RN [1]

RP SEQUENCE FROM N.A.

RX MEDLINE=95139066; PubMed=7837269;

RA Schatzl H.M., Decosta M., Taylor L., Cohen F.E., Prusiner S.B.;

RT "Prion protein gene variation among primates.";

RL J. Mol. Biol. 245:362-374(1995).

CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.

CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED "RODS".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU, CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME (GSS), SCRAPE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.

CC -----

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CC -----

CC EMBL: U08312; AAC50100.1; -

DR HSSP: P04925; IAG2.

DR InterPro: IPR000817; Prion.

DR Pfam: PF00377; prion. 1.

DR SMART: SM00157; PrP; 1.

DR PROSITE: PS00291; PRION\_1; 1.

DR PROSITE: PS00706; PRION\_2; 1.

KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.

FT NON\_TER 1 1

FT SIGNAL <1 15

FT CHAIN 16 >241

FT DISULFID 172 207

FT CARBOHYD 174 174

FT CARBOHYD 190 190

FT DOMAIN 44 84

FT REPEAT 44 52

FT REPEAT 53 60

FT REPEAT 61 68

FT REPEAT 69 76

FT REPEAT 77 84

FT NON\_TER 241 241

SO SEQUENCE 241 AA; 26373 MW; C6D2013EE7CAEC93 CRC64;

Query Match 80.4%; Score 41; DB 1; Length 241;

Best Local Similarity 61.5%; Pred. No. 0.011;

Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXESXAY 13

DB 207 CITOYEKESQAYY 219

## RESULT 8

PRIO\_MANSF STANDARD: PRT: 241 AA.

AC P40255;

DT 01-FEB-1995 (Rel. 31, Created)

DT 01-FEB-1995 (Rel. 31, Last sequence update)

DT 01-OCT-1996 (Rel. 34, Last annotation update)

DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).

GN PrNP.

OS Mandrillus sphinx (Mandrill) (Papio sphinx).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea; Cercopithecinae; Mandrillus.

OC NCBI\_TaxID=9561;

OX NCBI\_TaxID=9561;

RN [1]

RP SEQUENCE FROM N.A.

RX MEDLINE=95139066; PubMed=7837269;

RA Schatzl H.M., Decosta M., Taylor L., Cohen F.E., Prusiner S.B.;

RT "Prion protein gene variation among primates.";

RL J. Mol. Biol. 245:362-374(1995).

CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.

CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED "RODS".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU, CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME (GSS), SCRAPE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.

CC -----

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CC -----

CC EMBL: U08303; AAC50091.1; -

DR HSSP: P04925; IAG2.

DR InterPro: IPR000817; Prion.

DR Pfam: PF00377; prion. 1.

DR SMART: SM00157; PrP; 1.

DR PROSITE: PS00291; PRION\_1; 1.

DR PROSITE: PS00706; PRION\_2; 1.

KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.

FT NON\_TER 1 1

FT SIGNAL <1 15

FT CHAIN 16 223

FT PROPEP 224 >241

FT LIPID 223 223

FT DISULFID 172 207

FT CARBOHYD 174 174

FT CARBOHYD 190 190

FT DOMAIN 44 84

FT REPEAT 44 52

FT REPEAT 53 60

FT REPEAT 61 68

FT REPEAT 69 76

FT REPEAT 77 84

FT NON\_TER 241 241

SO SEQUENCE 241 AA; 26398 MW; E539D84E2B2B59DE CRC64;

Query Match 80.4%; Score 41; DB 1; Length 241;

Best Local Similarity 61.5%; Pred. No. 0.011;

Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXESXAY 13

DB 207 CITOYEKESQAYY 219

RESULT 9  
PRIO\_CERAE STANDARD: PRT: 245 AA.

ID AC P40250: 01-FEB-1995 (Rel. 31, Created)  
DT 01-FEB-1995 (Rel. 31, Last sequence update)  
DT 16-OCT-2001 (Rel. 40, Last annotation update)  
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).  
GN PRNP.  
OS Cercopithecus aethiops (Green monkey) (Grivet), and  
OS Cercopithecus diana (Diana monkey).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
OC Cercopithecinae; Cercopithecus.  
OX NCBI\_TaxID=9534, 36224;  
RN [1]  
RN SEQUENCE FROM N.A.  
RX MEDLINE=95139066; PubMed=7837269;  
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;  
RT "Prion protein gene variation among primates.";  
RL J. Mol. Biol. 245:362-374(1995).  
CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
CC "RODS".  
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME  
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
CC  
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CC  
CC EMBL: U08391; AAC50080.1; -;  
CC EMBL: U08392; AAC50081.1; -;  
CC HSSP: P04925; IAG2.  
CC InterPro: IPR000817; Prion.  
CC Pfam: PF00377; prion.1.  
CC PRINTS: PR00341; PRION.  
CC SMART: SM00157; PrP; 1.  
CC PROSITE: PS00291; PRION\_1; 1.  
CC PROSITE: PS00706; PRION\_2; 1.  
CC Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
CC FT SIGNAL 1 22  
CC FT CHAIN 23 222  
CC FT PROPEP 223 222  
CC FT LIPID 222 225  
CC FT DISULFID 171 206  
CC FT CARBOHYD 173 173  
CC FT CARBOHYD 189 189  
CC FT DOMAIN 51 83  
CC FT REPEAT 51 59  
CC FT REPEAT 60 67  
CC FT REPEAT 68 75  
CC FT REPEAT 83 83  
CC FT REPEAT 84 84  
CC SEQUENCE 245 AA; 26885 MW; D582B58E2726C99A CRC64;  
Query Match 80.4%; Score 41; DB 1; Length 245;  
Best Local Similarity 61.5%; Pred. No. 0.011;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
OY 1 CXTGYXESXAXY 13

Db 206 CITGYKESQAYY 218  
RESULT 10  
PRIO\_CERMO STANDARD: PRT: 246 AA.

ID AC Q95172; 095173; 01-NOV-1997 (Rel. 35, Created)  
DT 01-NOV-1997 (Rel. 35, Last sequence update)  
DT 15-JUL-1998 (Rel. 36, Last annotation update)  
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).  
GN PRNP.  
OS Cercopithecus mona, and  
OS Cercopithecus neglectus.  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
OC Cercopithecinae; Cercopithecus.  
OX NCBI\_TaxID=36226, 36227;  
RN [1]  
RN SEQUENCE FROM N.A.  
RX der Kuyt A.C., Dekker J.T., Goudsmit J.;  
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.  
CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE  
CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.  
CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED  
CC "RODS".  
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME  
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.  
CC  
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CC  
CC EMBL: U75386; AAB50625.1; -;  
CC EMBL: U75387; AAB50626.1; -;  
CC HSSP: P04925; IAG2.  
CC InterPro: IPR000817; Prion.  
CC Pfam: PF00377; prion.1.  
CC SMART: SM00157; PrP; 1.  
CC PROSITE: PS00291; PRION\_1; 1.  
CC PROSITE: PS00706; PRION\_2; 1.  
CC Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.  
CC FT SIGNAL 1 15  
CC FT CHAIN 16 223  
CC FT PROPEP 224 226  
CC FT LIPID 223 223  
CC FT DISULFID 172 207  
CC FT CARBOHYD 174 174  
CC FT CARBOHYD 190 190  
CC FT DOMAIN 44 84  
CC FT REPEAT 44 52  
CC FT REPEAT 53 60  
CC FT REPEAT 61 68  
CC FT REPEAT 76 76  
CC FT REPEAT 84 84  
CC SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;  
Query Match 80.4%; Score 41; DB 1; Length 246;  
Best Local Similarity 61.5%; Pred. No. 0.011;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13  
 Db 207 CITOYERESQAYY 219

## RESULT 11

ID PRIO\_CERPA STANDARD; PRT; 246 AA.

AC 095174;  
 DT 01-NOV-1997 (Rel. 35, Created)

DT 01-NOV-1997 (Rel. 35, Last sequence update)

DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).

GN PNP.

OS Cercopithecus patas.

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;

OC Cercopithecinae; Cercopithecus.

NCBI\_TaxID=21677;

RN [1]  
 RP SEQUENCE FROM N.A.

RA der Kuyt A.C., Dekker J.T., Goudsmit J.;

RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.

CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE

CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.

CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED

CC "RODS".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND

CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,

CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME

CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),

CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.

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CC -----

CC EMBL: U75388; AAB50627.1; -.

DR HSSP; P04925; IAG2.

DR InterPro; IPR000817; Prion.

DR Pfam; PF00377; Prion; 1.

DR SMART; SM00157; PrP; 1.

DR PROSITE; PS00291; PRION\_1; 1.

DR PROSITE; PS00706; PRION\_2; 1.

KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.

FT NON\_TER 1 1

FT SIGNAL <1 15

FT CHAIN 16 223

FT PROPEP 224 246

FT LIPID 223 223

FT DISULFID 172 207

FT CARBOHYD 174 174

FT CARBOHYD 190 190

FT DOMAIN 44 84

FT REPEAT 44 52

FT REPEAT 53 60

FT REPEAT 61 68

FT REPEAT 69 76

FT REPEAT 77 84

SO SEQUENCE 246 AA; 26886 MW; D35D105B8EC53108 CR664;

Query Match 80.4%; Score 41; DB 1; Length 246;

Best Local Similarity 61.5%; Pred. No. 0.011;

Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13

Db 207 CITOYERESQAYY 219

## RESULT 12

ID PRIO\_CERTO STANDARD; PRT; 246 AA.

AC 095176;  
 DT 01-NOV-1997 (Rel. 35, Created)

DT 01-NOV-1997 (Rel. 35, Last sequence update)

DT 01-NOV-1997 (Rel. 35, Last annotation update)

DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).

GN PNP.

OS Cercopithecus torquatus alyps (Red-crowned mangabey) (Sooty mangabey).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;

OC Cercopithecinae; Cercopithecus.

NCBI\_TaxID=9531;

RN [1]  
 RP SEQUENCE FROM N.A.

RA der Kuyt A.C., Dekker J.T., Goudsmit J.;

RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.

CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE

CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.

CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED

CC "RODS".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND

CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,

CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME

CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),

CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.

CC -----

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CC -----

CC EMBL: U75385; AAB50628.1; -.

DR HSSP; P04925; IAG2.

DR InterPro; IPR000817; Prion.

DR Pfam; PF00377; Prion; 1.

DR SMART; SM00157; PrP; 1.

DR PROSITE; PS00291; PRION\_1; 1.

DR PROSITE; PS00706; PRION\_2; 1.

KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.

FT NON\_TER 1 1

FT SIGNAL <1 15

FT CHAIN 16 223

FT PROPEP 224 246

FT LIPID 223 223

FT DISULFID 172 207

FT CARBOHYD 174 174

FT CARBOHYD 190 190

FT DOMAIN 44 84

FT REPEAT 44 52

FT REPEAT 53 60

FT REPEAT 61 68

FT REPEAT 69 76

FT REPEAT 77 84

SO SEQUENCE 246 AA; 26914 MW; F58679CBBEC5ADC7 CR664;

Query Match 80.4%; Score 41; DB 1; Length 246;

Best Local Similarity 61.5%; Pred. No. 0.011;

Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13

Db 207 CITOYERESQAVY 219

## RESULT 13

PRIO\_ATEPA STANDARD: PRT; 252 AA.

AC P51446; 01-OCT-1996 (Rel. 34, Created)

DT 01-OCT-1996 (Rel. 34, Last sequence update)

DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).

GN PRNP.

OS Ateles paniscus (Black spider monkey).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateleinae; Ateles.

NCBI\_TaxID=9510;

RN [1]

RP SEQUENCE FROM N.A.

RC TISSUE=Brain; PubMed=7991600;

RA Cervenakova L., Brown P., Goldfarb L.G., Nagle J., Petrone K.,

RA Rubenstein R., Dubnick M., Gibbs C.J., Gajdusek D.C.;

RT "Infectious amyloid precursor gene sequences in primates used for

RT experimental transmission of human spongiform encephalopathy.";

RT Proc. Natl. Acad. Sci. U.S.A. 91:1159-1262(1994).

CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE

CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.

CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED

CC "RODS".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND

CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,

CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME

CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),

CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.

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CC between the Swiss Institute of Bioinformatics and the EMBL outstation -

CC the European Bioinformatics Institute. There are no restrictions on its

CC use by non-profit institutions as long as its content is in no way

CC modified and this statement is not removed. Usage by and for commercial

CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>CC or send an email to [license@isb-sib.ch](mailto:license@isb-sib.ch)).

CC EMBL: U51564; AAA68634.1; -

CC HSSP: P04156; 1EIG.

CC InterPro: IPR000817; Prion.

CC Pfam: PF00377; Prion. 1.

CC PRINTS: PR00341; PRION.

CC SMART: SM00157; PRP. 1.

CC PROSITE: PS00291; PRION\_1; 1.

CC PROSITE: PS00706; PRION\_2; 1.

CC Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.

CC SIGNAL 1 22

CC CHAIN 23 229

CC PROPEP 230 252

CC LIPID 229 229

CC DISULFID 178 213

CC CARBOHYD 180 180

CC CARBOHYD 196 196

CC DOMAIN 51 90

CC REPEAT 51 58

CC REPEAT 59 66

CC REPEAT 67 74

CC REPEAT 75 82

CC REPEAT 83 90

CC SEQUENCE 252 AA; 27718 MW; 20EA38A42DC56D1 CRC64;

CC Query Match 80.4%; Score 41; DB 1; Length 252;

CC Best Local Similarity 61.5%; Pred. No. 0.012;

CC Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXEXXAXY 13

Db 213 CITOYERESQAVY 225

## RESULT 14

PRIO\_CALJA STANDARD: PRT; 252 AA.

AC P40247; 01-FEB-1995 (Rel. 31, Created)

DT 01-FEB-1995 (Rel. 31, Last sequence update)

DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).

GN PRNP.

OS Callithrix jacchus (Common marmoset).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Primates; Platyrrhini; Callitrichidae;

NCBI\_TaxID=9483;

RN [1]

RP SEQUENCE FROM N.A.

RC MEDLINE=95139066; PubMed=7837269;

RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;

RT "Prion protein gene variation among primates.";

RT J. Mol. Biol. 245:362-374(1995).

CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE

CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.

CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED

CC "RODS".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND

CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,

CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME

CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),

CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.

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CC use by non-profit institutions as long as its content is in no way

CC modified and this statement is not removed. Usage by and for commercial

CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>CC or send an email to [license@isb-sib.ch](mailto:license@isb-sib.ch)).

CC EMBL: U08304; AAC50092.1; -

CC HSSP: P04925; 1AG2.

CC InterPro: IPR000817; Prion.

CC Pfam: PF00377; Prion. 1.

CC PRINTS: PR00341; PRION.

CC SMART: SM00157; PRP. 1.

CC PROSITE: PS00291; PRION\_1; 1.

CC PROSITE: PS00706; PRION\_2; 1.

CC Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.

CC SIGNAL 1 22

CC CHAIN 23 229

CC PROPEP 230 252

CC LIPID 229 229

CC DISULFID 178 213

CC CARBOHYD 180 180

CC CARBOHYD 196 196

CC DOMAIN 51 90

CC REPEAT 51 58

CC REPEAT 59 66

CC REPEAT 67 74

CC REPEAT 75 82

CC REPEAT 83 90

CC SEQUENCE 252 AA; 27639 MW; B2800B60F5DCE664 CRC64;

CC Query Match 80.4%; Score 41; DB 1; Length 252;

CC Best Local Similarity 61.5%; Pred. No. 0.012;







GenCore version 5.1.4-p5-4578  
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OM protein - protein search, using sw model

Run on: March 24, 2003, 17:19:46 ; Search time 28.4375 Seconds  
(without alignments)  
94.193 Million cell updates/sec

Title: US-09-508-828B-3  
Perfect score: 51  
Sequence: 1 CXTQYXXESXAXY 13

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 671580 seqs, 206047115 residues

Total number of hits satisfying chosen parameters: 671580

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database :

SPTREMBL\_21:\*  
1: SP\_archaea:\*  
2: SP\_bacteria:\*  
3: SP\_fungi:\*  
4: SP\_human:\*  
5: SP\_invertebrate:\*  
6: SP\_mammal:\*  
7: SP\_mhc:\*  
8: SP\_organelle:\*  
9: SP\_phage:\*  
10: SP\_plant:\*  
11: SP\_rodent:\*  
12: SP\_virus:\*  
13: SP\_vertebrate:\*  
14: SP\_unclassified:\*  
15: SP\_virus:\*  
16: SP\_bacteriophage:\*  
17: SP\_archaeap:\*

Pred. NO. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	42	82.4	243	11	P97895
2	42	82.4	254	6	O9TSE8
3	41	80.4	195	6	O9T903
4	41	80.4	195	6	O9T693
5	41	80.4	200	6	O9T912
6	41	80.4	202	6	O9T908
7	41	80.4	212	6	O9T698
8	41	80.4	213	6	O9T904
9	41	80.4	214	6	O9T903
10	41	80.4	215	6	O9T904
11	41	80.4	216	6	O9T900
12	41	80.4	220	6	O02825
13	41	80.4	223	6	O9T910
14	41	80.4	226	6	O9T907
15	41	80.4	227	6	O9T909
16	41	80.4	233	4	P78446

17	41	80.4	235	6	O9T695	O9T695 glitaffa cam
18	41	80.4	240	11	O8VHV4	O8VHV4 microtus ag
19	41	80.4	245	4	O15216	O15216 homo sapien
20	41	80.4	245	6	O9MZU7	O9MZU7 odocolleus
21	41	80.4	246	4	O60489	O60489 homo sapien
22	41	80.4	248	11	O8VHV5	O8VHV5 clethrionom
23	41	80.4	253	4	O8VPI9	O8VPI9 homo sapien
24	41	80.4	253	4	O96E70	O96E70 homo sapien
25	41	80.4	253	4	O8TBG0	O8TBG0 homo sapien
26	41	80.4	253	11	O9Z0T5	O9Z0T5 meriones un
27	41	80.4	254	11	O9Z0T4	O9Z0T4 sigmodon fu
28	41	80.4	254	11	O9QYR9	O9QYR9 mus musculu
29	41	80.4	254	11	O8VHV6	O8VHV6 apodemus sy
30	41	80.4	256	6	O9TV01	O9TV01 capra hircu
31	41	80.4	256	6	O9TV07	O9TV07 capra hircu
32	41	80.4	256	6	O9TTU5	O9TTU5 ovis aries
33	41	80.4	256	6	O9MZU8	O9MZU8 odocolleus
34	41	80.4	256	6	O9SN12	O9SN12 ovis aries
35	41	80.4	256	6	O9SM08	O9SM08 budorcas ta
36	41	80.4	256	6	O02841	O02841 odocolleus
37	41	80.4	256	6	O62670	O62670 cervus elap
38	41	80.4	256	6	O46648	O46648 capra hircu
39	41	80.4	256	6	O8SPV7	O8SPV7 capra hircu
40	41	80.4	256	6	O8SPV6	O8SPV6 capra hircu
41	41	80.4	256	6	O8SPV5	O8SPV5 capra hircu
42	41	80.4	256	6	O8SPV4	O8SPV4 capra hircu
43	41	80.4	257	6	O46593	O46593 canis fami
44	41	80.4	264	6	O9MZU6	O9MZU6 antilocapra
45	41	80.4	285	4	O75942	O75942 homo sapien

## ALIGNMENTS

### RESULT 1

ID	P97895	PRELIMINARY;	PRT;	243 AA.
AC	P97895;			
DT	01-MAY-1997 (TREMBLrel. 03, Created)			
DT	01-MAY-1997 (TREMBLrel. 03, Last sequence update)			
DT	01-JUN-2001 (TREMBLrel. 17, Last annotation update)			
DE	Scrapie prion (PRP 27-30) (PRP 27-30 protein) (Fragment).			
OS	Mesocricetus auratus (Golden hamster).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;			
OC	Mesocricetus.			
OX	NCBI_TaxID=10036;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RA	MEDLINE-87108309; PubMed-3100471;			
RA	McKinley M.P., Prusiner S.B.;			
RT	"Biology and structure of scrapie prions.";			
RL	Int. Rev. Neurobiol. 28:1-57(1986).			
RN	[2]			
RP	SEQUENCE OF 79-223 FROM N.A.			
RA	MEDLINE-85176927; PubMed-2859120;			
RA	Oesch B., Westaway D., Waelchli M., McKinley M.P., Kent S.B.,			
RA	Aebbersold R.H., Barry R.A., Tempel P., Teplow D.B., Hood L.E.,			
RA	Prusiner S.B., Weissmann C.;			
RT	"A cellular gene encodes scrapie PrP 27-30 protein.";			
RL	Cell 40:735-746(1985).			
DR	EMBL; M37381; AAA37090.1; -			
DR	EMBL; K02344; AAA37093.1; -			
DR	HSSP; P04273; 1B10.			
DR	InterPro: IPR000817; Prion.			
DR	Pfam: PF00377; prion; 1.			
DR	PRINTS; PR00341; PRION.			
DR	SMART; SM00157; PRP; 1.			
DR	PROSITE; PS00291; PRION_1; 1.			
DR	PROSITE; PS00706; PRION_2; 1.			
KW	Prion.			
FT	NON_TER			
SO	SEQUENCE	243 AA;	26643 MW;	4F53612BFFP240F9 CRC64;

Query Match 82.4%; Score 42; DB 11; Length 243;  
 Best Local Similarity 61.5%; Pred. No. 0.017;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXESXAY 13  
 |||||  
 DB 203 CTVQYQESQAY 215

RESULT 2  
 O9TSF8 PRELIMINARY; PRT; 254 AA.

AC O9TSF8;  
 DT 01-MAY-2000 (TREMBLrel. 13, Created)  
 DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)  
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)  
 DE Prion protein.  
 GN PRP.  
 OS Oryctolagus cuniculus (Rabbit).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.  
 OX NCBI\_TaxID=9986;  
 RN [1]

RP SEQUENCE FROM N.A.  
 RX MEDLINE-99391519; PubMed-10463862;  
 RA Rubenstein R., Kascsak R.J., Papini M., Kascsak R., Carp R.I.,  
 RA Lafuente G., Meleiro R., Langeveld J.;  
 RT "Immune surveillance and antigen conformation determines humoral  
 immune response to the prion protein immunogen.";  
 RL J. Neurovirol. 5:401-413(1999).  
 DR EMBL: AF015603; AAD01554.1; -;  
 DR HSSP: P10279; IDMY.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; prion. 1.  
 DR PRINTS: PR00341; PRION.  
 DR SMART: SM00157; PRP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 SQ SEQUENCE 254 AA; 27546 MW; 30066042D24BDF55 CRC64;

Query Match 82.4%; Score 42; DB 6; Length 254;  
 Best Local Similarity 61.5%; Pred. No. 0.017;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXESXAY 13  
 |||||  
 DB 215 CTVQYQESQAY 227

RESULT 3  
 O97903 PRELIMINARY; PRT; 195 AA.

AC O97903;  
 DT 01-MAY-1999 (TREMBLrel. 10, Created)  
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)  
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Addax nasomaculatus.  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
 OC Bovidae; Hippotraginae; Addax.  
 OX NCBI\_TaxID=59515;  
 RN [1]

RP SEQUENCE FROM N.A.  
 RC TISSUE=PRP;  
 RX MEDLINE-99303687; PubMed-10373359;  
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RA Schwarz T.F., Werner T., Schatzl H.M.;  
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
 of flexible regions of the prion protein.";  
 RL J. Mol. Biol. 289:1163-1178(1999).  
 DE Prion protein (Fragment).

DR EMBL: AF117309; AAD19980.1; -;  
 DR HSSP: P10279; IDMY.  
 DR InterPro: IPR002395; Kininogen.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; prion. 1.  
 DR PRINTS: PR00341; KININOGEN.  
 DR PRINTS: PR00341; PRION.  
 DR SMART: SM00157; PRP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 FT NON\_TER 1 1  
 FT NON\_TER 195 195  
 SQ SEQUENCE 195 AA; 21321 MW; 6A9BAG7E1AFECAG CRC64;

Query Match 80.4%; Score 41; DB 6; Length 195;  
 Best Local Similarity 61.5%; Pred. No. 0.023;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXESXAY 13  
 |||||  
 DB 181 CTVQYQESQAY 193

RESULT 4  
 O97693 PRELIMINARY; PRT; 195 AA.

AC O97693;  
 DT 01-MAY-1999 (TREMBLrel. 10, Created)  
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)  
 DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Canis lupus (Gray wolf).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.  
 OX NCBI\_TaxID=9612;  
 RN [1]

RP SEQUENCE FROM N.A.  
 RX MEDLINE-99303687; PubMed-10373359;  
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RA Schwarz T.F., Werner T., Schatzl H.M.;  
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
 of flexible regions of the prion protein.";  
 RL J. Mol. Biol. 289:1163-1178(1999).  
 DR EMBL: AF113939; AAD12063.1; -;  
 DR HSSP: P04925; IAG2.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; prion. 1.  
 DR PRINTS: PR00341; PRION.  
 DR SMART: SM00157; PRP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 FT NON\_TER 1 1  
 FT NON\_TER 195 195  
 SQ SEQUENCE 195 AA; 21097 MW; 9D18E4EB9AA5D031 CRC64;

Query Match 80.4%; Score 41; DB 6; Length 195;  
 Best Local Similarity 61.5%; Pred. No. 0.023;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXESXAY 13  
 |||||  
 DB 177 CTVQYQESQAY 189

RESULT 5  
 O97912 PRELIMINARY; PRT; 200 AA.

AC O97912;  
 DT 01-MAY-1999 (TREMBLrel. 10, Created)  
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)  
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)  
 DE Prion protein (Fragment).

GN PRP.  
 OS Bison bonasus (European bison).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
 OC Bovidae; Bovinae; Bison.  
 NCBI\_TaxID=9902;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=PBL;  
 RX MEDLINE=99303687; PubMed=10373359;  
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RT Schwarz T.F., Werner T., Schatzl H.M.;  
 RT Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
 of flexible regions of the prion protein.\*;  
 RL J. Mol. Biol. 289:1163-1178(1999).  
 DR EMBL: AF117328; AAD19990.1; -;  
 DR HSSP: P10279; IDWY.  
 DR InterPro: IPR002395; Kininogen.  
 DR InterPro: IPR001610; PAC.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion; 1.  
 DR PRINTS: PR00334; KININOGEN.  
 DR PRINTS: PR00341; PRION.  
 DR SMART: SM00086; PAC; 1.  
 DR SMART: SM00157; PRP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 FT NON\_TER 1  
 FT NON\_TER 1  
 SQ SEQUENCE 200 AA; 21674 MM; 1F270CDF4BE5271B CRC64;  
 Query Match 80.4%; Score 41; DB 6; Length 200;  
 Best Local Similarity 61.5%; Pred. No. 0.024;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 QY 1 CXTQYXXESXAXY 13  
 DB 182 CITOYQRESEAY 194  
 ID 097908 PRELIMINARY; PRT; 202 AA.  
 AC 097908;  
 DT 01-MAY-1999 (TREMBLrel. 10, Created)  
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)  
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Capra nubiana (Nubian ibex).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
 OC Bovidae; Caprinae; Capra.  
 NCBI\_TaxID=72543;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=PBL;  
 RX MEDLINE=99303687; PubMed=10373359;  
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RT Schwarz T.F., Werner T., Schatzl H.M.;  
 RT Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
 of flexible regions of the prion protein.\*;  
 RL J. Mol. Biol. 289:1163-1178(1999).  
 DR EMBL: AF117319; AAD19990.1; -;  
 DR HSSP: P10279; IDWY.  
 DR InterPro: IPR002395; Kininogen.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion; 1.  
 DR PRINTS: PR00334; KININOGEN.  
 DR PRINTS: PR00341; PRION.  
 DR SMART: SM00157; PRP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 DE Prion protein (Fragment).

FT NON\_TER 1  
 FT NON\_TER 1  
 SQ SEQUENCE 202 AA; 21949 MM; DB0634A43B4DB77F CRC64;  
 Query Match 80.4%; Score 41; DB 6; Length 202;  
 Best Local Similarity 61.5%; Pred. No. 0.024;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 QY 1 CXTQYXXESXAXY 13  
 DB 189 CITOYQRESEAY 201  
 ID 097698 PRELIMINARY; PRT; 212 AA.  
 AC 097698;  
 DT 01-MAY-1999 (TREMBLrel. 10, Created)  
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)  
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Cervus elaphus canadensis (wapiti).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervidae;  
 OC Cervidae; Cervinae; Cervus.  
 NCBI\_TaxID=9861;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=97317556; PubMed=9174569;  
 RA Schatzl H.M., Wopfinger F., Gilch S., von Brunn A., Jager G.,  
 RT "Is codon 129 of prion protein polymorphic in human beings but not in  
 animals?"  
 RL Lancet 349:1603-1604(1997).  
 RN [2]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=99303687; PubMed=10373359;  
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RT Schwarz T.F., Werner T., Schatzl H.M.;  
 RT Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
 of flexible regions of the prion protein.\*;  
 RL J. Mol. Biol. 289:1163-1178(1999).  
 DR EMBL: AF113945; AAD13293.1; -;  
 DR HSSP: P10279; IDWY.  
 DR InterPro: IPR002395; Kininogen.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion; 1.  
 DR PRINTS: PR00334; KININOGEN.  
 DR PRINTS: PR00341; PRION.  
 DR SMART: SM00157; PRP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 FT NON\_TER 1  
 FT NON\_TER 1  
 SQ SEQUENCE 212 AA; 23032 MM; 57E58ABDE5E2A1B5 CRC64;  
 Query Match 80.4%; Score 41; DB 6; Length 212;  
 Best Local Similarity 61.5%; Pred. No. 0.025;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 QY 1 CXTQYXXESXAXY 13  
 DB 181 CITOYQRESEAY 193  
 ID 097V04 PRELIMINARY; PRT; 213 AA.  
 AC 097V04;  
 DT 01-MAY-2000 (TREMBLrel. 13, Created)  
 DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)  
 DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)  
 DE Prion protein (Fragment).

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GN PRP.
OS Canis familiaris (Dog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OX NCBI_TaxID=9615;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian prps reveals high conservation
of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1178(1999).
DR EMBL; AF113937; AAD12061.1; -.
DR HSSP; P04925; 1AG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
FT NON_TER 1
FT NON_TER 213
SQ SEQUENCE 213 AA; 22997 MW; 26A224EF5E7A0507 CRC64;

Query Match
Best Local Similarity 80.4%; Score 41; DB 6; Length 213;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

    1 CXTQYXXESXAXY 13
Db 177 CXTQYXXESXAXY 189

RESULT 9
O9TV03 PRELIMINARY; PRT; 214 AA.
ID O9TV03
AC O9TV03;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Canis familiaris (Dog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OX NCBI_TaxID=9615;
RN [1]
RP SEQUENCE FROM N.A.
RX STRAIN-BREED DACHSHUND;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian prps reveals high conservation
of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1178(1999).
DR EMBL; AF113938; AAD12062.1; -.
DR HSSP; P04925; 1AG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
FT NON_TER 1
FT NON_TER 214
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Query Match
Best Local Similarity 80.4%; Score 41; DB 6; Length 214;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

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OY 1 CXTQYXXESXAXY 13
Db 177 CXTQYXXESXAXY 189

RESULT 10
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ID O9TV04
AC O9TV04;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Bos javanicus (Wild banteng).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidea;
OC Bovidae; Bovinae; Bos.
OX NCBI_TaxID=9906;
RN [1]
RP SEQUENCE FROM N.A.
RX TISSUE-PBL;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian prps reveals high conservation
of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1178(1999).
DR EMBL; AF117310; AAD19981.1; -.
DR HSSP; P10279; 1DWY.
DR InterPro; IPR002395; Kininogen.
DR InterPro; IPR001610; PAC.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00334; KININOGEN.
DR PRINTS; PR00341; PRION.
DR SMART; SM00086; PAC; 1.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
FT NON_TER 1
FT NON_TER 215
SQ SEQUENCE 215 AA; 23182 MW; 97A36721B1E73A66 CRC64;

Query Match
Best Local Similarity 80.4%; Score 41; DB 6; Length 215;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

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Db 190 CXTQYXXESXAXY 202

RESULT 11
O9TV00 PRELIMINARY; PRT; 216 AA.
ID O9TV00
AC O9TV00;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidea;
OC Bovidae; Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RX TISSUE-PBL;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;

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DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 FT NON\_TER 1  
 FT VARIANT 209 209 R -> K.  
 FT NON\_TER 226 226  
 SO SEQUENCE 226 AA; 24384 MW; D845E27B219ABD2F CRC64;

Query Match 80.4%; Score 41; DB 6; Length 226;  
 Best Local Similarity 61.5%; Pred. No. 0.027;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESKXAY 13  
 Db 195 CITOYXRESQAYY 207

## RESULT 15

O97909 PRELIMINARY; PRT; 227 AA.  
 AC O97909;  
 DT 01-MAY-1999 (TREMBlrel. 10, Created)  
 DT 01-MAY-1999 (TREMBlrel. 10, Last sequence update)  
 DT 01-JUN-2002 (TREMBlrel. 21, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Trgelaphus angasi (Nyala).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
 OC Bovidae; Bovinae; Tragelaphus.  
 OX NCBI\_TaxID=66437;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=BL;  
 RX MEDLINE=99303687; PubMed=10373359;  
 RA Wopfner F., Weidenhofer G., Schneider R., von Bruhn A., Gluch S.,  
 RA Schwarz T.F., Werner T., Schatzl H.M.;  
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
 RT of flexible regions of the prion protein.";  
 RL J. Mol. Biol. 289:1163-1178(1999).  
 DR EMBL; AF117321; AAD19992.1; -.  
 DR HSSP; P10279; IDWY.  
 DR InterPro; IPR002395; KlnInogen.  
 DR InterPro; IPR000817; prion.  
 DR Pfam; PF00377; prion.1.  
 DR PRINTS; PR00334; KININOGEN.  
 DR PRINTS; PR00341; PRION.  
 DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 FT NON\_TER 1  
 FT NON\_TER 227 227  
 SO SEQUENCE 227 AA; 24651 MW; 99FD0BAF0B6A0077 CRC64;

Query Match 80.4%; Score 41; DB 6; Length 227;  
 Best Local Similarity 61.5%; Pred. No. 0.027;  
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESKXAY 13  
 Db 201 CITOYXRESQAYY 213

Search completed: March 24, 2003, 17:22:11  
 Job time : 28.4375 secs

GenCore version 5.1.4-p5.4578  
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OM protein - protein search, using sw model

Run on: March 24, 2003, 17:20:26 ; Search time 12.4583 Seconds  
(without alignments)  
30.702 Million cell updates/sec

Title: US-09-508-828B-3

Perfect score: 51

Sequence: 1 CXTQYXXESXAXY 13

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0

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Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database: Issued\_Patents\_AA:\*

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2: /cgn2\_6/ptodata/2/1aa/5B.COMB.pep:\*  
3: /cgn2\_6/ptodata/2/1aa/6A.COMB.pep:\*  
4: /cgn2\_6/ptodata/2/1aa/6B.COMB.pep:\*  
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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2	42	82.4	254	4	US-09-128-450-26
3	42	82.4	254	4	US-09-823-484-26
4	41	80.4	15	1	US-08-244-701B-48
5	41	80.4	15	4	US-09-076-721-48
6	41	80.4	17	4	US-09-353-348-3
7	41	80.4	22	1	US-08-244-701B-33
8	41	80.4	22	1	US-08-244-701B-35
9	41	80.4	22	1	US-08-244-701B-37
10	41	80.4	22	4	US-09-076-721-35
11	41	80.4	22	4	US-09-076-721-37
12	41	80.4	22	4	US-08-244-701B-62
13	41	80.4	24	1	US-08-244-701B-62
14	41	80.4	24	4	US-09-076-721-62
15	41	80.4	25	4	US-09-353-348-7
16	41	80.4	142	1	US-08-556-823-10
17	41	80.4	253	1	US-08-242-188-2
18	41	80.4	253	1	US-08-509-261A-9
19	41	80.4	253	1	US-08-660-626-8
20	41	80.4	253	1	US-08-692-892-2
21	41	80.4	253	2	US-08-713-939A-2
22	41	80.4	253	2	US-08-868-162A-22
23	41	80.4	253	4	US-09-031-168-8
24	41	80.4	253	4	US-09-128-450-20
25	41	80.4	253	4	US-09-036-579-2
26	41	80.4	253	4	US-08-823-484-20
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28	41	80.4	254	1	US-08-242-188-1	Sequence 1, Appl1
29	41	80.4	254	1	US-08-509-261A-1	Sequence 1, Appl1
30	41	80.4	254	1	US-08-660-626-7	Sequence 7, Appl1
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32	41	80.4	254	2	US-08-713-939A-1	Sequence 1, Appl1
33	41	80.4	254	2	US-08-868-162A-21	Sequence 21, Appl1
34	41	80.4	254	4	US-09-031-168-7	Sequence 7, Appl1
35	41	80.4	254	4	US-09-128-450-19	Sequence 19, Appl1
36	41	80.4	254	4	US-09-128-450-28	Sequence 28, Appl1
37	41	80.4	254	4	US-09-036-579-1	Sequence 1, Appl1
38	41	80.4	254	4	US-09-823-494-19	Sequence 19, Appl1
39	41	80.4	254	4	US-09-823-494-28	Sequence 28, Appl1
40	41	80.4	254	4	US-09-550-374-1	Sequence 1, Appl1
41	41	80.4	255	1	US-08-242-188-4	Sequence 4, Appl1
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43	41	80.4	255	1	US-08-660-626-10	Sequence 10, Appl1
44	41	80.4	255	1	US-08-692-892-2	Sequence 2, Appl1
45	41	80.4	255	2	US-08-713-939A-4	Sequence 4, Appl1

## ALIGNMENTS

RESULT 1  
US-08-556-823-2  
Sequence 2, Application US/08556823  
Patent No. 5750361  
GENERAL INFORMATION:  
APPLICANT: Stanley B. Prusiner  
APPLICANT: Kiyotoshi Kaneko  
TITLE OF INVENTION: Formation and use of prion protein  
NUMBER OF INVENTION: 1  
NUMBER OF SEQUENCES: 10  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson  
STREET: 2200 Sand Hill Road, Suite 100  
CITY: Menlo Park  
STATE: California  
COUNTRY: USA  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Ascii  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/556, 823  
FILING DATE:  
CLASSIFICATION: 530  
ATTORNEY/AGENT INFORMATION:  
NAME: Valetta Gregg  
REGISTRATION NUMBER: 07532/003001  
TELEPHONE: (415) 322-5070  
TELEFAX: (415) 854-0875  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 142 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-556-823-2

Query Match 82.4%; Score 42; DB 1; Length 142;  
Best Local Similarity 61.5%; Pred. No. 0.014;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
QY 1 CXTQYXXESXAXY 13  
DB 125 CTTQYKESQAVY 137

RESULT 2  
US-09-128-450-26  
Sequence 26, Application US/09128450  
Patent No. 6211149  
GENERAL INFORMATION:  
APPLICANT: Chesebro, Bruce W  
APPLICANT: Caughey, Byron W  
APPLICANT: Chabry, Joelle  
APPLICANT: Priola, Susette  
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion  
FILE REFERENCE: 50121  
CURRENT APPLICATION NUMBER: US/09/128,450  
CURRENT FILING DATE: 1998-08-03  
NUMBER OF SEQ ID NOS: 29  
SOFTWARE: Patentln Ver. 2.0  
SEQ ID NO 26  
LENGTH: 254  
TYPE: PRT  
ORGANISM: Hamster sp.  
US-09-128-450-26

Query Match  
Best Local Similarity 82.4%; Score 42; DB 4; Length 254;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13  
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Db 214 CTTQYQKESQAY 226

RESULT 3  
US-09-823-494-26  
Sequence 26, Application US/09823494  
Patent No. 6355610  
GENERAL INFORMATION:  
APPLICANT: Chesebro, Bruce W  
APPLICANT: Caughey, Byron W  
APPLICANT: Chabry, Joelle  
APPLICANT: Priola, Susette  
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion  
FILE REFERENCE: 50121  
CURRENT APPLICATION NUMBER: US/09/823,494  
CURRENT FILING DATE: 2001-03-30  
PRIOR APPLICATION NUMBER: 09/128,450  
PRIOR FILING DATE: 1998-08-03  
NUMBER OF SEQ ID NOS: 29  
SOFTWARE: Patentln Ver. 2.0  
SEQ ID NO 26  
LENGTH: 254  
TYPE: PRT  
ORGANISM: Hamster sp.  
US-09-823-494-26

Query Match  
Best Local Similarity 82.4%; Score 42; DB 4; Length 254;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13  
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Db 214 CTTQYQKESQAY 226

RESULT 4  
US-08-244-701B-48  
Sequence 48, Application US/08244701B  
Patent No. 573572  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.

TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentln Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/244,701B  
FILING DATE: 02-JUN-1994  
CLASSIFICATION: 436  
ATTORNEY/AGENT INFORMATION:  
NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
INFORMATION FOR SEQ ID NO: 48:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-244-701B-48

Query Match  
Best Local Similarity 80.4%; Score 41; DB 1; Length 15;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13  
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Db 1 CTTQYQKESQAY 13

RESULT 5  
US-09-076-721-48  
Sequence 48, Application US/09076721  
Patent No. 6376905  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentln Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/076,721  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/244,701  
FILING DATE:





NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 35:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 22 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 1  
OTHER INFORMATION: /label=X  
OTHER INFORMATION: /note=X may be absent or present independently  
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US-08-244-701B-35

Query Match 80.4%; Score 41; DB 1; Length 22;  
Best Local Similarity 61.5%; Pred. No. 0.0033;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXESXAY 13  
DB 3 CITOYERESQAY 15

RESULT 9  
US-08-244-701B-37  
Sequence 37, Application US/08244701B  
Patent No. 5773572  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/244,701B  
FILING DATE: 02-JUN-1994  
CLASSIFICATION: 436  
ATTORNEY/AGENT INFORMATION:  
NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 37:  
SEQUENCE CHARACTERISTICS:

LENGTH: 22 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 1  
OTHER INFORMATION: /label=X  
OTHER INFORMATION: /note=X may be absent or present independently  
OTHER INFORMATION: of Y and denotes one or more amino acid(s)  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 22  
OTHER INFORMATION: /label=Y  
OTHER INFORMATION: /note=Y may be absent or present independently  
OTHER INFORMATION: of X and denotes one or more amino acid(s)  
US-08-244-701B-37

Query Match 80.4%; Score 41; DB 1; Length 22;  
Best Local Similarity 61.5%; Pred. No. 0.0033;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXESXAY 13  
DB 3 CITOYERESQAY 15

RESULT 10  
US-09-076-721-33  
Sequence 33, Application US/09076721  
Patent No. 6379905  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/076,721  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/244,701  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 33:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 22 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:



Query Match 80.4%; Score 41; DB 4; Length 22;  
Best Local Similarity 61.5%; Pred. No. 0.0033;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13  
1 1 1 1 1 1 1  
3 CITOYERESQAVY 15

## RESULT 13

US-08-244-701B-62  
Sequence 62, Application US/08244701B  
Patent No. 5773572  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/244,701B  
FILING DATE: 02-JUN-1994  
CLASSIFICATION: 436  
ATTORNEY/AGENT INFORMATION:  
NAME: Panucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 62:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 24 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
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FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 4  
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US-08-244-701B-62

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Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13  
1 1 1 1 1 1 1  
3 CXTQYXXESQAVY 15

## RESULT 14

US-09-076-721-62  
Sequence 62, Application US/09076721  
Patent No. 6379905  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/076,721  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:

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APPLICATION NUMBER: US 08/244,701
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Fanucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 62:
SEQUENCE CHARACTERISTICS:
LENGTH: 24 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /label=X
OTHER INFORMATION: /note=X may be absent or present independently
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
FEATURE:
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LOCATION: 4
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FEATURE:
NAME/KEY: Modified-site
LOCATION: 24
OTHER INFORMATION: /label=X
OTHER INFORMATION: /note=Y may be absent or present independently

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OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-09-076-721-62
Query Match
Best Local Similarity 80.4%; Score 41; DB 4; Length 24;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 CXTQYXXESQAYY 13
Db 3 CXTQYXXESQAYY 15
RESULT 15
US-09-353-348-7
Sequence 7, Application US/09353348
Patent No. 6261790
GENERAL INFORMATION:
APPLICANT: O'Rourke, Katherine I.
TITLE OF INVENTION: Monoclonal Antibodies and Antibody Cocktail for
TITLE OF INVENTION: Detection of Prion Protein as an Indication of
FILE REFERENCE: O'Rourke
CURRENT APPLICATION NUMBER: US/09/353,348
CURRENT FILING DATE: 1999-07-15
NUMBER OF SEQ ID NOS: 11
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 7
LENGTH: 26
TYPE: PRT
ORGANISM: Ovis aries
US-09-353-348-7
Query Match
Best Local Similarity 80.4%; Score 41; DB 4; Length 26;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 1 CXTQYXXESQAYY 13
Db 5 CXTQYXXESQAYY 17

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Search completed: March 24, 2003, 17:23:05  
Job time : 12.4583 secs

10

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GenCore version 5.1.4-p5-4578  
Copyright (c) 1993 - 2003 CompuGen Ltd.

## OM protein - protein search, using sw model

Run on: March 24, 2003, 17:23:11 ; Search time 11.6458 Seconds  
(without alignments)  
59,679 Million cell updates/sec

Title: US-09-508-828b-3  
Perfect score: 51  
Sequence: 1 CXTQYXESXAXY 13

Scoring table: BIOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 221153 seqs, 53462247 residues

Total number of hits satisfying chosen parameters: 221153

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

## Database :

Published Applications AA.\*  
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2: /cgn2\_6/ptodata/1/pubpaa/PCOT\_NEW\_PUB.pep.\*  
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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Result No.	Score	Query Match	Length	DB ID	Description
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2	41	80.4	161	10	US-09-745-003-7 Sequence 7, Appl
3	41	80.4	161	10	US-09-745-003-9 Sequence 9, Appl
4	41	80.4	162	10	US-09-745-003-10 Sequence 10, Appl
5	41	80.4	164	10	US-09-745-003-12 Sequence 12, Appl
6	41	80.4	253	10	US-09-904-987-3 Sequence 3, Appl
7	41	80.4	253	10	US-09-919-172-57 Sequence 57, Appl
8	41	80.4	253	10	US-09-943-906-2 Sequence 2, Appl
9	41	80.4	254	9	US-10-106-574-5 Sequence 5, Appl
10	41	80.4	254	9	US-10-106-574-6 Sequence 6, Appl
11	41	80.4	254	9	US-10-106-574-7 Sequence 7, Appl
12	41	80.4	254	9	US-10-106-574-8 Sequence 8, Appl
13	41	80.4	254	10	US-09-943-906-1 Sequence 1, Appl
14	41	80.4	255	10	US-09-943-906-4 Sequence 4, Appl
15	41	80.4	256	9	US-10-109-551-2 Sequence 2, Appl
16	41	80.4	256	9	US-10-109-551-4 Sequence 4, Appl
17	41	80.4	256	9	US-10-109-551-6 Sequence 6, Appl
18	41	80.4	256	9	US-10-109-551-8 Sequence 8, Appl
19	41	80.4	256	9	US-10-109-551-10 Sequence 10, Appl

20	41	80.4	263	10	US-09-943-906-3 Sequence 3, Appl
21	41	80.4	264	9	US-10-209-194-2 Sequence 2, Appl
22	41	80.4	439	9	US-10-115-984-2 Sequence 2, Appl
23	30	58.8	47	10	US-09-832-312-7 Sequence 7, Appl
24	30	58.8	249	10	US-09-832-312-9 Sequence 9, Appl
25	30	58.8	319	10	US-09-832-312-5 Sequence 5, Appl
26	30	58.8	339	10	US-09-832-312-3 Sequence 3, Appl
27	30	58.8	339	10	US-09-832-312-34 Sequence 34, Appl
28	30	58.8	339	10	US-09-832-312-36 Sequence 36, Appl
29	30	58.8	339	10	US-09-832-312-36 Sequence 36, Appl
30	30	58.8	339	10	US-09-832-312-40 Sequence 40, Appl
31	28	54.9	205	9	US-09-905-291A-23 Sequence 23, Appl
32	28	54.9	205	9	US-10-066-500-99 Sequence 99, Appl
33	28	54.9	205	9	US-09-902-853-23 Sequence 23, Appl
34	28	54.9	205	9	US-09-907-842-23 Sequence 23, Appl
35	28	54.9	205	9	US-09-907-842-23 Sequence 23, Appl
36	28	54.9	205	9	US-09-904-011-23 Sequence 23, Appl
37	28	54.9	205	9	US-10-028-072-274 Sequence 274, Appl
38	28	54.9	205	9	US-09-906-742-23 Sequence 23, Appl
39	28	54.9	205	9	US-10-121-049-274 Sequence 274, Appl
40	28	54.9	205	9	US-10-123-904-274 Sequence 274, Appl
41	28	54.9	205	9	US-10-140-470-274 Sequence 274, Appl
42	28	54.9	205	9	US-09-906-838-23 Sequence 23, Appl
43	28	54.9	205	9	US-09-907-613-23 Sequence 23, Appl
44	28	54.9	205	9	US-09-907-942-23 Sequence 23, Appl
45	28	54.9	205	9	US-10-175-746-274 Sequence 274, Appl

## ALIGNMENTS

RESULT 1  
US-09-745-003-11  
Sequence 11, Application US/09745003  
Patent No. US20020042122A1  
GENERAL INFORMATION:  
APPLICANT: Bazar, Fernando J  
TITLE OF INVENTION: Human Proteins; Related Reagents  
FILE REFERENCE: P1P2  
CURRENT APPLICATION NUMBER: US/09/745,003  
CURRENT FILING DATE: 2000-12-20  
NUMBER OF SEQ ID NOS: 13  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 11  
LENGTH: 163  
TYPE: PRT  
ORGANISM: Hamster sp.  
US-09-745-003-11

Query Match 82.4%; Score 42; DB 10; Length 163;  
Best Local Similarity 61.5%; Pred. No. 0.014;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXESXAXY 13  
DB 123 CXTQYXESXAXY 135

RESULT 2  
US-09-745-003-7  
Sequence 7, Application US/09745003  
Patent No. US20020042122A1  
GENERAL INFORMATION:  
APPLICANT: Bazar, Fernando J  
TITLE OF INVENTION: Human Proteins; Related Reagents  
FILE REFERENCE: P1P2  
CURRENT APPLICATION NUMBER: US/09/745,003  
CURRENT FILING DATE: 2000-12-20  
NUMBER OF SEQ ID NOS: 13  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 7  
LENGTH: 161  
TYPE: PRT

ORGANISM: sheep  
US-09-745-003-7

Query Match  
Best Local Similarity 80.4%; Score 41; DB 10; Length 161;  
Pred. No. 0.023;

Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

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Db 122 CITOYERESQAY 134

RESULT 3  
US-09-745-003-9

Sequence 9, Application US/09745003  
Patent No. US20020042122A1

GENERAL INFORMATION:

APPLICANT: Bazan, Fernando J

FILE REFERENCE: Prp2

CURRENT APPLICATION NUMBER: US/09/745,003

CURRENT FILING DATE: 2000-12-20

NUMBER OF SEQ ID NOS: 13

SOFTWARE: Patentln Ver. 2.0

SEQ ID NO 9

LENGTH: 161

TYPE: PRT

ORGANISM: bovine

US-09-745-003-9

Query Match  
Best Local Similarity 80.4%; Score 41; DB 10; Length 161;  
Pred. No. 0.023;

Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXESXAY 13  
| | | | | | | | | |  
Db 122 CITOYERESQAY 134

RESULT 4  
US-09-745-003-10

Sequence 10, Application US/09745003  
Patent No. US20020042122A1

GENERAL INFORMATION:

APPLICANT: Bazan, Fernando J

FILE REFERENCE: Prp2

CURRENT APPLICATION NUMBER: US/09/745,003

CURRENT FILING DATE: 2000-12-20

NUMBER OF SEQ ID NOS: 13

SOFTWARE: Patentln Ver. 2.0

SEQ ID NO 10

LENGTH: 162

TYPE: PRT

ORGANISM: primate

US-09-745-003-10

Query Match  
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Pred. No. 0.023;

Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXESXAY 13  
| | | | | | | | | |  
Db 123 CITOYERESQAY 135

RESULT 5  
US-09-745-003-12

Sequence 12, Application US/09745003  
Patent No. US20020042122A1

GENERAL INFORMATION:

APPLICANT: Bazan, Fernando J

TITLE OF INVENTION: Human Proteins; Related Reagents

FILE REFERENCE: Prp2  
CURRENT APPLICATION NUMBER: US/09/745,003

CURRENT FILING DATE: 2000-12-20

NUMBER OF SEQ ID NOS: 13

SOFTWARE: Patentln Ver. 2.0

SEQ ID NO 12

LENGTH: 164

TYPE: PRT

ORGANISM: rodent

US-09-745-003-12

Query Match  
Best Local Similarity 80.4%; Score 41; DB 10; Length 164;  
Pred. No. 0.023;

Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXESXAY 13  
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Db 123 CITOYERESQAY 135

RESULT 6  
US-09-904-987-3

Sequence 3, Application US/09904987  
Patent No. US20020037908A1

GENERAL INFORMATION:

APPLICANT: No. US20020037908A1actyl, Inc.

TITLE OF INVENTION: Methods and Compositions for Controlling Pathological and Prep

FILE REFERENCE: 42108/26146

CURRENT APPLICATION NUMBER: US/09/904,987

CURRENT FILING DATE: 2001-07-12

NUMBER OF SEQ ID NOS: 7

SOFTWARE: Patentln version 3.0

SEQ ID NO 3

LENGTH: 253

TYPE: PRT

ORGANISM: homo sapiens

PUBLICATION INFORMATION:

DATABASE ACCESSION NUMBER: NCBI ENTREZ / XM\_009567

DATABASE ENTRY DATE: 2001-04-17

RELEVANT RESIDUES: (1)...(253)

US-09-904-987-3

Query Match  
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Pred. No. 0.023;

Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXESXAY 13  
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Db 214 CITOYERESQAY 226

RESULT 7  
US-09-919-172-57

Sequence 57, Application US/09919172  
Patent No. US20020119463A1

GENERAL INFORMATION:

APPLICANT: Paris, Mary

TITLE OF INVENTION: PROSTATE CANCER MARKERS

FILE REFERENCE: PA-0036 US

CURRENT APPLICATION NUMBER: US/09/919,172

CURRENT FILING DATE: 2001-07-30

PRIOR APPLICATION NUMBER: 60/222,469

PRIOR FILING DATE: 2000-07-28

NUMBER OF SEQ ID NOS: 102

SOFTWARE: PERL Program

SEQ ID NO 57

LENGTH: 253

TYPE: PRT

ORGANISM: Homo sapiens

FEATURE: NAME/KEY: misc\_feature



OTHER INFORMATION: Incyte ID NO. US20020119463A1 1256895CD1  
US-09-919-172-57

Query Match 80.4%; Score 41; DB 10; Length 253;  
Best Local Similarity 61.5%; Pred. No. 0.035;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13  
| | | | |  
Db 214 CITOYERESQAYY 226

RESULT 8  
US-09-943-906-2  
Sequence 2, Application US/09943906  
Patent No. US20020150571A1  
GENERAL INFORMATION:

APPLICANT: Frusiner, Stanley B.  
Williamson, R. Anthony

Burton, Dennis R.

TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PRP

NUMBER OF SEQUENCES: 86

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson P.C.

STREET: 2200 Sand Hill Road

CITY: Menlo Park

STATE: CA

COUNTRY: U.S.A.

ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

OPERATING SYSTEM: DOS

SOFTWARE: FASTSEQ Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/943,906

FILING DATE: 30-Aug-2001

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/550,374

FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Bozicevic, Karl

REGISTRATION NUMBER: 28,807

REFERENCE/DOCKET NUMBER: 06510/059001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 415-854-5277

TELEFAX: 415-854-0875

TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 253 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 2:

US-09-943-906-2

Query Match 80.4%; Score 41; DB 10; Length 253;  
Best Local Similarity 61.5%; Pred. No. 0.035;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13  
| | | | |  
Db 214 CITOYERESQAYY 226

RESULT 9  
US-10-106-574-5  
Sequence 5, Application US/10106574  
Patent No. US20020164335A1  
GENERAL INFORMATION:

APPLICANT: Harris, David A.  
Stewart, Richard S.  
TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion  
FILE REFERENCE: 09789280.0003  
CURRENT APPLICATION NUMBER: US/10/106,574  
CURRENT FILING DATE: 2002-03-26  
NUMBER OF SEQ ID NOS: 8  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 5  
LENGTH: 254  
TYPE: PRT  
ORGANISM: Murinae gen. sp.  
US-10-106-574-5

Query Match 80.4%; Score 41; DB 9; Length 254;  
Best Local Similarity 61.5%; Pred. No. 0.035;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13  
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Db 213 CVOYOKESQAYY 225

RESULT 10  
US-10-106-574-6  
Sequence 6, Application US/10106574  
Patent No. US20020164335A1  
GENERAL INFORMATION:

APPLICANT: Harris, David A.  
Stewart, Richard S.

TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion

FILE REFERENCE: 09789280.0003

CURRENT APPLICATION NUMBER: US/10/106,574

CURRENT FILING DATE: 2002-03-26

NUMBER OF SEQ ID NOS: 8

SOFTWARE: PatentIn version 3.1

SEQ ID NO 6

LENGTH: 254

TYPE: PRT

ORGANISM: Murinae gen. sp.  
US-10-106-574-6

Query Match 80.4%; Score 41; DB 9; Length 254;  
Best Local Similarity 61.5%; Pred. No. 0.035;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13  
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Db 213 CVOYOKESQAYY 225

RESULT 11  
US-10-106-574-7  
Sequence 7, Application US/10106574  
Patent No. US20020164335A1  
GENERAL INFORMATION:

APPLICANT: Harris, David A.  
Stewart, Richard S.

TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion

FILE REFERENCE: 09789280.0003

CURRENT APPLICATION NUMBER: US/10/106,574

CURRENT FILING DATE: 2002-03-26

NUMBER OF SEQ ID NOS: 8

SOFTWARE: PatentIn version 3.1

SEQ ID NO 7

LENGTH: 254

TYPE: PRT

ORGANISM: Murinae gen. sp.  
US-10-106-574-7

Query Match 80.4%; Score 41; DB 9; Length 254;  
Best Local Similarity 61.5%; Pred. No. 0.035;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13  
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Db 213 CXTQYXXESXAY 225

## RESULT 12

US-10-106-574-8  
; Sequence 8, Application US/10106574  
; Patent No. US20020164335A1  
; GENERAL INFORMATION:  
; APPLICANT: Harris, David A.  
; APPLICANT: Stewart, Richard S.  
; TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Dis  
; FILE REFERENCE: 09789280.0003  
; CURRENT APPLICATION NUMBER: US/10/106,574  
; CURRENT FILING DATE: 2002-03-26  
; NUMBER OF SEQ ID NOS: 8  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 8  
; LENGTH: 254  
; TYPE: PRT  
; ORGANISM: Murinae gen. sp.  
US-10-106-574-8

Query Match 80.4%; Score 41; DB 9; Length 254;  
Best Local Similarity 61.5%; Pred. No. 0.035;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13  
| | | | |  
Db 213 CXTQYXXESXAY 225

## RESULT 13

US-09-943-906-1  
; Sequence 1, Application US/09943906  
; Patent No. US20020150571A1  
; GENERAL INFORMATION:  
; APPLICANT: Prusiner, Stanley B.  
; APPLICANT: Williamson, R. Anthony  
; APPLICANT: Burton, Dennis R.

; TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP  
; NUMBER OF SEQUENCES: 86  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Fish & Richardson P.C.  
; STREET: 2200 Sand Hill Road  
; CITY: Menlo Park  
; STATE: CA  
; COUNTRY: U.S.A.  
; ZIP: 94025

; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FASTSEQ Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/943,906  
; FILING DATE: 30-Aug-2001  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 09/550,374  
; FILING DATE: <Unknown>

; ATTORNEY/AGENT INFORMATION:  
; NAME: Bozicevic, Karl  
; REGISTRATION NUMBER: 28,807  
; REFERENCE/DOCKET NUMBER: 06510/059001  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 415-854-5277  
; TELEFAX: 415-854-0875  
; TELEX: <Unknown>  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:

LENGTH: 254 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
SEQUENCE DESCRIPTION: SEQ ID NO: 1:  
US-09-943-906-1

Query Match 80.4%; Score 41; DB 10; Length 254;  
Best Local Similarity 61.5%; Pred. No. 0.035;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13  
| | | | |  
Db 213 CXTQYXXESXAY 225

## RESULT 14

US-09-943-906-4  
; Sequence 4, Application US/09943906  
; Patent No. US20020150571A1  
; GENERAL INFORMATION:  
; APPLICANT: Prusiner, Stanley B.  
; APPLICANT: Williamson, R. Anthony  
; APPLICANT: Burton, Dennis R.

; TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP  
; NUMBER OF SEQUENCES: 86  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Fish & Richardson P.C.  
; STREET: 2200 Sand Hill Road  
; CITY: Menlo Park  
; STATE: CA  
; COUNTRY: U.S.A.  
; ZIP: 94025

; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FASTSEQ Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/943,906  
; FILING DATE: 30-Aug-2001  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 09/550,374  
; FILING DATE: <Unknown>

; ATTORNEY/AGENT INFORMATION:  
; NAME: Bozicevic, Karl  
; REGISTRATION NUMBER: 28,807  
; REFERENCE/DOCKET NUMBER: 06510/059001  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 415-854-5277  
; TELEFAX: 415-854-0875  
; TELEX: <Unknown>  
; INFORMATION FOR SEQ ID NO: 4:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 255 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:  
US-09-943-906-4

Query Match 80.4%; Score 41; DB 10; Length 255;  
Best Local Similarity 61.5%; Pred. No. 0.036;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13  
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Db 216 CXTQYXXESXAY 228

RESULT 15  
US-10-109-551-2  
; Sequence 2, Application US/10109551  
; Publication No. US20020194635A1  
; GENERAL INFORMATION:  
; APPLICANT: DUNNE, PATRICK W.  
; APPLICANT: PIEDRAHITA, JORGE  
; TITLE OF INVENTION: TRANSGENIC ANIMALS RESISTANT TO TRANSMISSIBLE  
; FILE REFERENCE: TANK:207US  
; CURRENT APPLICATION NUMBER: US/10/109,551  
; PRIOR APPLICATION NUMBER: 60/280,549  
; PRIOR FILING DATE: 2001-03-30  
; NUMBER OF SEQ ID NOS: 10  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 2  
; LENGTH: 256  
; TYPE: PRT  
; ORGANISM: Bos taurus  
US-10-109-551-2

Query Match 80.4%; Score 41; DB 9; Length 256;  
Best Local Similarity 61.5%; Pred. No. 0.036;  
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
OY 1 CXTQYXXESXAY 13  
| | | | | | | | | |  
Db 217 CTTQYQRESQAY 229

Search completed: March 24, 2003, 17:25:05  
Job time : 11.6458 secs

